

Niveau(x) d'enseignement: 7
Centre d'intérêt: 71

Numéro EDUQ : 8170377

Schwartz, Geraldine.

Program to develop reading efficiency and academic effectiveness in "high risk" college students : final report, phase two = Programme pour développer la compétence en lecture et le rendement scolaire chez les étudiants, "dangereusement faibles" du collégial / report written by Geraldine Schwartz ; Champlain section written by Susan Woodruff, Susan Kerwin ; Rosemont section written by Yves Michaud. -- [Québec] : Direction générale de l'enseignement collégial, 1977.
xi, 273 p. : graph. ; 28 cm.

Comprend du texte en français. "This is an interdisciplinary bilingual program : psychology/psychologie, English/français, begun September 1975". "Colleges: John Abbott, Champlain, Rosemont". Code: 15-3085.

Cote Dewey: 418'.007/S399p

Cote LC: LB/j050.5

Descripteur(s): *Didactique du français *Didactique de l'anglais
*Difficulté de lecture *Difficulté scolaire *Rendement scolaire
*Compétence de l'étudiant *Enseignement correctif *Tutorat *Collégial (Niveau) *Secondaire (Niveau)

Identificateur(s) de nom: *Zajonc, R. B

L'habileté en lecture étant l'un des principaux facteurs qui déterminent le succès scolaire, ce document présente la seconde phase d'une recherche qui vise à élaborer un programme pour améliorer le rendement en lecture des étudiants "dangereusement faibles" du collégial. Son principe directeur est que l'un des moyens les plus efficaces d'apprendre est d'enseigner (Zajonc, 1976). Deux parties: une enquête (données sociologiques extensives et données cognitives intensives) qui tente de cerner les raisons du déclin des habiletés en lecture; l'évaluation d'un programme pour développer la compétence en lecture basé sur un apprentissage actif.

La recherche, qui s'est poursuivie en 1976-1977, touche désormais les collèges anglophones Champlain et John Abbott, le collège francophone Rosemont et quelques écoles secondaires. Le DRT (diagnostic reading test) et des instruments mesurant certains facteurs cognitifs ont été utilisés auprès d'un total de 2307 étudiants de première année du collégial. Quant au programme de correction, il comprend: 1. un cours de psychologie; 2. un cours d'anglais (ou de français); 3. une expérience de tutorat avec des élèves du secondaire.

L'enquête a fait ressortir la pauvreté endémique des habiletés en lecture au collégial: faible vitesse, vocabulaire imprécis, difficultés de compréhension et de synthèse. L'expérimentation du programme de correction de ces déficiences s'est avérée un succès et confirme l'hypothèse selon laquelle le fait d'enseigner est pour l'étudiant un

excellent moyen d'apprendre. Le programme est prêt à être implanté dans les collèges anglophones. Une poursuite des recherches au cégep Rosemont devrait apporter les mêmes résultats du côté francophone.

Type de document: r

Région(s) administrative(s): 063

Notice(s) connexe(s): 8170376, 8170444

Financement: Bénéficiaire - Collèges John Abbott, Champlain,
Rosemont

Organisme(s) source(s) - MEQ - DGEC

Programme(s) de subvention - PROSIP

Auteur de l'analyse: ar



Gouvernement du Québec
Ministère de l'Éducation
Direction générale de
l'enseignement collégial

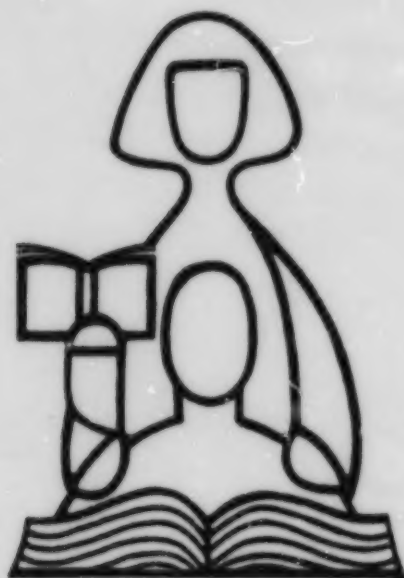
PROGRAM TO DEVELOP
READING EFFICIENCY AND ACADEMIC EFFECTIVENESS
IN "HIGH RISK" COLLEGE STUDENTS

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PROGRAMME POUR DÉVELOPPER
LA COMPÉTENCE EN LECTURE ET LE RENDEMENT SCOLAIRE
CHEZ LES ÉTUDIANTS, "DANGEUREUSEMENT FAIBLES"
DU COLLÉGIAL

•

PSYCHOLOGY / PSYCHOLOGIE
ENGLISH / FRANÇAIS



FINAL REPORT - PHASE TWO
JUNE 1977

PROGRAM TO DEVELOP READING EFFICIENCY AND ACADEMIC EFFECTIVENESS
IN "HIGH RISK" COLLEGE STUDENTS

PROGRAMME POUR DEVELOPPER LA COMPETENCE
EN LECTURE ET LE RENDEMENT SCOLAIRE CHEZ
LES ETUDIANTS "DANGEREUSEMENT FAIBLES"
DU COLLEGIAL

This is an interdisciplinary bilingual program

Psychology/Psychologie

English/Français

Begun September 1975

Final Report - Phase Two

June 1977

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PROGRAM TO DEVELOP
READING EFFICIENCY AND ACADEMIC EFFECTIVENESS
IN "HIGH RISK" COLLEGE STUDENTS

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PREFACE

This program is based on the premise
that active learners are infinitely more
effective performers than passive learners.
Teaching is an active intellectual process.
We have passed on to our students the
opportunity to teach and thus to become
active learners.

G.S.

ACKNOWLEDGEMENTS

No project of this magnitude is possible without the extraordinary effort of many people. I would like to begin this report by expressing my sincere and unreserved thanks and affection to the faculty of this program:

Alex Stirling

Susan Woodruff

Yves Michaud

Pearl Grubert

Susan Kerwin

Thérèse Belzile

for their magnificent effort beyond every possible call of duty, for their patience with me, and for their dedicated excellence as teachers and researchers.

Since this project uses the high schools as a community resource for teaching, the high school section heads were an important source of support. They also voluntarily looked after hundreds of day to day details and made the fieldwork possible. Their efforts are especially appreciated. Two people at the high school level deserve special mention for their contribution to the research team:

Nadine Serrouya

for translation of documents and tests and for her special insights about the Francophone perspective;

Wayne Clifford

for his long time support of the project in the high schools, and for the preparation of the manual "Guide for High Schools" that is part of this program.

Many people have supported this program with their special skills. Their help was given cheerfully and often after regular hours. I would like to express my special thanks to the following people:

Rhonda Amsel	- McGill Programmer & Statistical advisor.
David Liwanyan	- John Abbott Computer Programmer.
Norah Clark	- John Abbott Print Room Supervisor.
John Starkey	- John Abbott Graphics
Peggy Yeates	- John Abbott typist and general "person Friday"
Judy Mahaffy	- John Abbott front line book distributor, and student supporter.

Without the enthusiastic support of the administration of each of the colleges this project would not have been possible. The fruits of our research, and the benefits to future generations of students are due to their insight about the importance of efficient reading to college students and their consequent support of this program.

We would especially like to thank the people in the "Service des Programmes" whose support of this program have given us the opportunity to learn and grow. Future Quebec students will owe a great deal to their insight and to their support of this project:

Claude Therrien

Guy Gauthier

Roger Paquin

to our students - who have given us the opportunity to
teach them and thus learn,

and finally to those, whose extraordinary patience,
tolerance, and friendship has enabled this whole thing
to work. It is not possible to calculate the value of
their support. A very special thank you to:

Gerald Schwartz

Elaine Stirling

Peter Woodruff

Sincerely,

Geraldine Schwartz.

The following manuals were prepared for this program:

1. Student's Log	Schwartz
2. Intermediate Program	Schwartz
3. Instructions for the User	Schwartz
4. Reading Efficiency	Woodruff
5. College Student's Log	Woodruff
6. Manual for Testing	Stirling
7. Guide for High Schools	Clifford
8. Manuel de lecture	Belzile
9. Exercices de Vocabulaire	Belzile
10. Les Trucs du Métier	Belzile
11. Journal de Bord (Cegeps)	Belzile
12. Journal de Bord (pupille)	Michaud
13. Manuel de Tuteur	Michaud
14. Psychologie du Comportement	Michaud
15. Manuel d'administration des tests	Michaud

* Handbook for Tutors (1975)	Schwartz
Tricks of the Trade (1974)	Schwartz

are manuals used by the program. (These were prepared as part of the author's dissertation research in 1974-75).

PROGRAM TO DEVELOP READING EFFICIENCY AND
ACADEMIC EFFECTIVENESS IN "HIGH RISK"
CEGEP STUDENTS

INTRODUCTION

During the past 2 years the extensive and intensive study, within a tight research framework, of the reading and related academic skills of college students has provided an enormous bank of hard data, as well as some useful insights on possible solutions to the problem for the substantial number of deficit readers encountered.

It is the purpose of this report

- 1) to present this information in tabulated and concise form.
- 2) to comment on this data.
- 3) to describe in detail, the methods, procedures and curriculum devised by the researchers to Develop Reading Efficiency and Academic Effectiveness in "High Risk" College Students.
- 4) to present the results of this research program.
- 5) to discuss the implications of the findings of this research for Quebec Anglophone and Francophone Colleges.
- 6) to discuss the potential contribution of this research to the education of young adults in the English and French speaking communities of the world. (The paper presented at the 35th Annual Meeting of the International Council of Psychologists at San Francisco. "PROGRAM TO DEVELOP READING EFFICIENCY IN "HIGH RISK" COLLEGE STUDENTS" will be included in the appendix of this report after August 30, 1977.)

OVERVIEW

READING AND THE COLLEGE STUDENT

In August and September 1976, 1709 English speaking students at John Abbott College and Champlain College took the Diagnostic Reading test. In December 598 students at Collège de Rosemont took the same test in French. The results of these tests indicate the reading skills of these students are well below the standards of North American students.

Figure 1. presents the results of 896 entering students at John Abbott College. The John Abbott data will be used as an example. It should be noted (see comparative data table 7, p.47 that the results at Champlain, and Rosemont are significantly lower. Figure 1. shows the percentage and number of students scoring at or below the 50th percentile of the indicated grade levels, 8 through college freshman, on the Diagnostic Reading Test.

At John Abbott twenty percent of the students fell below the 50th percentile for grade 9, 51.5% fell below the 50th percentile for grade 11, 65% below for grade 12, and 84.5% were below the 50th percentile for the college freshman level. At Champlain 34.2% fell below the 50th percentile for grade 9, 63.3% fell below the 50th percentile for grade 11, 72.5% below for grade 12 and 85.7% were below the 50th percentile for the college freshman level. At Rosemont 44.6% fell below the 50th percentile for grade 9, 80.2% fell below the 50th

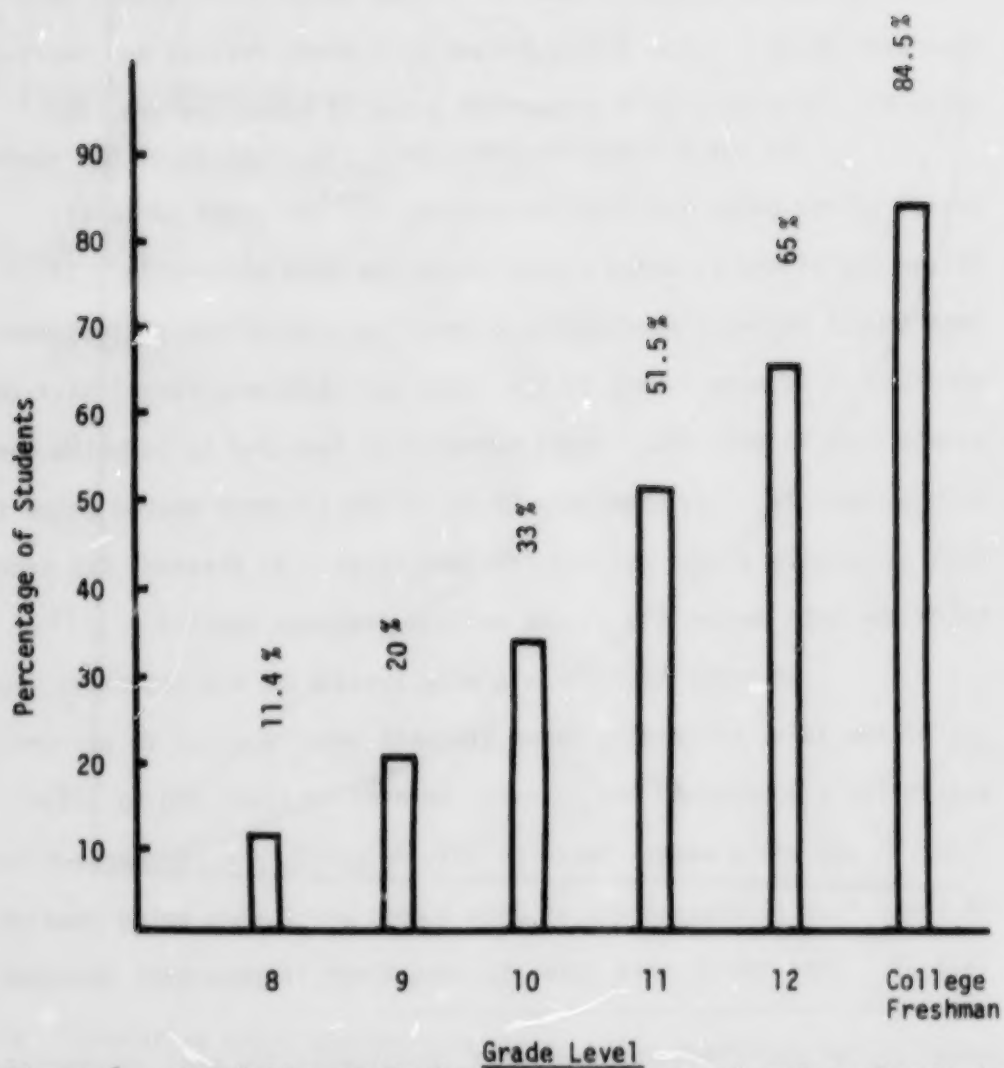


Figure 1. Cumulative graph showing percentage and number of entering students scoring at or below the FIFTIETH percentile of the indicated grade level on the DIAGNOSTIC READING TEST.

percentile for grade 11, 87.4% fell below for grade 12 and 98% were below the 50th percentile for the college freshman level.

Figure 2. compares the performance of John Abbott students to other students in North America . (The Diagnostic Reading Test is standardized on a North American sample - norms revised and reprinted in 1974). Both college freshman and grade 12 norms are provided.¹

At the college freshman level 756 or 84.5% of the students tested scored below the 50th percentile. At the grade 12 level, 581 or 65% of the students scored below the 50th percentile. If John Abbott students represented a cross section of the socioeconomic stratas (it is more likely in the upper socioeconomic range) half the sample (448 in this case) might normally be expected to be below the 50th percentile. (At Champlain 85.7% of the students scored below the 50th percentile at the college freshman level. At Rosemont 98% scored below the 50th percentile at the college freshman level.)

In order to provide a more systematic and objective understanding of the level of reading tasks students were required to perform to successfully understand the material covered in class and to solve problems and write papers based on this material, the researchers rated 85 texts from 16 departments at John Abbott which were being used in 1976-77. Departments were asked to send their introductory text and a

Note: 1. College freshman norms were considered the most appropriate measure for Cegep students because grade 12 students in the original sample were still in high school and were not faced with a college freshman curriculum. The level of difficulty of the texts used at the college suggests that students are expected to read and perform tasks at least equivalent to those required of college freshmen.

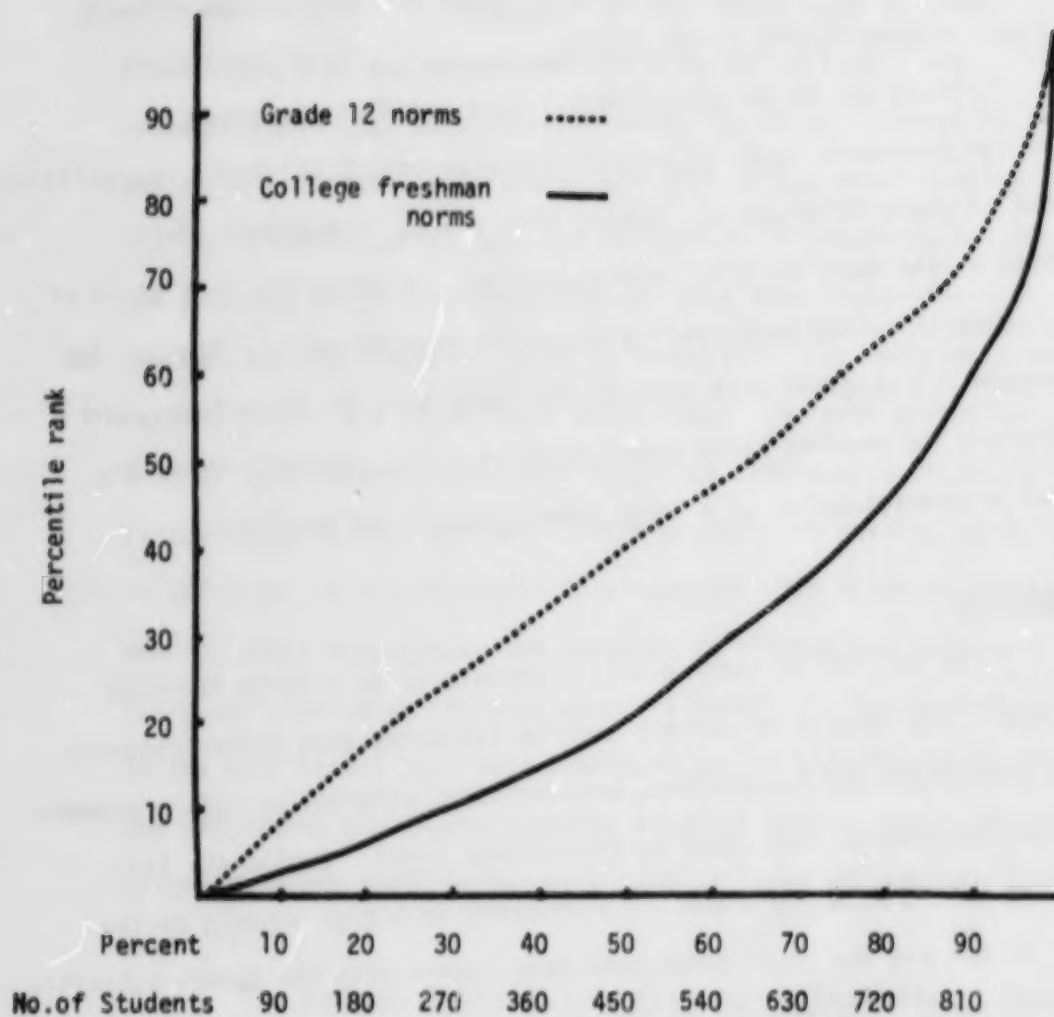


Figure 2. Cumulative graph showing percentage and number of entering students scoring at or below the indicated percentile rank on the DIAGNOSTIC READING TEST' grade 12 and college freshman norms.

selection of 4 or 5 other texts used in subsequent semesters. The SMOG Readability Formula was used to rate the texts (for specific details on SMOG ratings, and texts by department see article Reading and the College Student, p. 135, Appendix A).

Sixty out of 85 texts (70.6%) were rated at the grade 13 (College Freshman) level or above. Forty-seven (55.8%) had a readability level of grade 14 or above. (Using SMOG scores, a grade of 13-16 indicates the need for a college education). Considering that 84.5% of the students tested were reading below the 50th percentile for College Freshman, it is clear that many of the texts used at the college, and therefore the reading tasks based on these texts, are well above the level of understanding of a large proportion of the students.

DISCUSSION

The decline of reading skills appears to be a North American dilemma. The results of current testing indicates that Quebec students, both Anglophone and Francophone, are seriously affected by this phenomena. Nor is the problem restricted to the college level. During the last 4 years more than 5,000 grade 7 - 9 students in 9 high schools on the West Island and the South Shore have been tested with the Gates-MacGinitie Reading Test. Consistently 20-25% of these students score 1.5 to 4.5 years below their grade level. The testing of 100 students at a French high school in January 1977 showed that more than 40% of the students were in the remedial range. Reasons for this decline must certainly

be complex, but one important factor may be that curriculum in North American schools during the sixties and seventies tended to de-emphasize skill training. This has been particularly true in the high schools where teachers of the language arts were encouraged to emphasize creativity, oral expression and appreciation of literature. Curriculum builders hoped that this approach would foster an interest in reading, and a taste for good literature, and that skills would develop as a result. Unfortunately, this has not generally occurred, and reading for pleasure has not become a popular past time either for high school students or young adults. This is especially true for people whose reading skills are below their grade level. A large proportion of them are non-readers. The most important consequence of this phenomena is that poor readers get very little practice in reading at any level. In addition, it appears that the strategies with which to approach the reading tasks required by the academic curriculum are lacking. Fifteen years ago curriculum included specific models for these kinds of tasks. In the more recent past this procedure was considered overly restrictive. The old method did however provide students with at least one model. Bright students could adapt these, and at least all students knew where to begin.

The program developed by this research team attacks both the problems of the lack of practice and lack of effective strategies to approach academic tasks. In spite of the fact that texts used at college level are generally too difficult for the student's ability

it is not considered advisable to choose easier texts. The choice of text for college freshman curriculum is limited and good texts may also be difficult. As well, texts used in the universities are at least as difficult and it may be a disservice to students to provide easy texts at the college level and lull students into expecting the same when they reach the university. It would be more useful to institute a program which would raise the students' reading ability and teach them the skills and strategies to effectively deal with the texts at hand. The current program is directed towards that end (rationale and procedures described in detail on pp. 53-68.)

THE INTENSIVE (COGNITIVE-DEVELOPMENTAL)
AND EXTENSIVE (SOCIOLOGICAL) STUDY OF
THE READING SKILLS IN YOUNG ADULTS

In order to accomplish the objectives of this research an intensive and extensive understanding of the factors that have affected the development of reading skills in today's young adults are essential. Accordingly the reading scores of 2,307 freshman college students were analyzed according to the following variables:

SOCIOLOGICAL EXTENSIVE VARIABLES

1. High school attended.
2. College program selected.
3. Language group.
4. Birth Rank.
5. Family size.
6. Sex.
7. Parent's education.
8. Parent's age.

COGNITIVE-INTENSIVE VARIABLES

In addition to sociological parameters, internal cognitive factors also affect the development of reading skills. To date the instruments to analyze these parameters in large samples are not well developed. Therefore it has been the objective of this research to

test a battery of these instruments on the sample population in order to determine which of them may be used effectively to understand, from a cognitive developmental perspective, which factors affect the development of reading skills in young adults. Where no measures were available on the market, new ones were developed by the researchers in areas considered important to this study. A large proportion of these measures were translated into French and used on the French students at Collège de Rosemont and école secondaire de Roberval. A selection of these instruments in English and French are included in the appendix of this report. The following variables were considered:

- 1) The relationship of perceptual competence to reading skills.
- 2) The effect of "locus of control" on the development of reading skills.
- 3) The effect of hemispheric (lateral) preference on the development of reading skills.
- 4) The effect of attitude towards reading on the development of reading skills.
- 5) The effect of the self concept (attitude towards the self as a reader and learner) on the development of reading skills.
- 6) The effect of this reading program in the high schools on the student's school satisfaction and distress.
- 7) The effect of self-directed modification of study behavior on the development of reading skills.

SOCIOLOGICAL DATA

It has long been suspected that sociological factors such as school attended, education of parents and birth rank play an important role in the skill development and eventual achievement of young adults. The literature indicates that these factors have rarely been systematically studied in large samples.

The data presented in this research initiates such a systematic study. The size of the sample is large (most samples that report results of political elections with accuracy are rarely over 1,000). The sample size in this study ($n = 2,307$) provides a large enough population in each group so that the findings may be taken seriously. While no study of this type is definitive, the large number of subjects involved provides weight and validity to the findings.

HIGH SCHOOL DATA

It has often been considered that the quality of education in specific high schools provides their graduates with different levels of basic skills with which to approach the academic tasks required by post secondary institutions. Table 1a, 1b, and 1c present the mean scores in rank order on the Diagnostic Reading Test for high schools feeding each of the colleges.

It should be noted that substantial significant differences exist between schools. For example in Table 1a the difference between the mean score at Beaconsfield (69.77) and the mean score at John Rennie (64.81) is significant at the .001 level ($t = 35.05$, $df = 173$, $cv = 3.37$) whereas the difference between the mean score at St. Thomas (66.29) and John Rennie (64.81) is not significant ($t = 80$, $df = 154$, $cv = 3.37$).

These differences may be due to socioeconomic factors based on the location of the school in different demographic areas where ethnic, religious, and economic variables provide different student populations. However, the quality of education available in the schools cannot be completely discounted, particularly if the scores are very high or very low. In general, schools at the top of the rank order in each of the college districts have the public reputation of being "good" schools.

Note 2.

- Population - indicates the group of students concerned.
- Provincial number - e.g. 010 indicates the number used at the provincial level to represent a particular program - 010 - Health Science.
- $\bar{X}/100$ - the average (mean) for this population on the total score of the Diagnostic Reading Test (Comprehension 1-20, 80-100, and Vocabulary 21-79) out of 100.
e.g. An average of 72.08 means - an average of 72.08 correct answers out of 100.
- $\bar{n}$ - represents the number in the sample.
- S.D. - Standard Deviation - This measure gives an indication of the variability or range of scores.
e.g. Scores which are fairly similar to the average score would be those at Chateauguay high school in Table 1a where S.D. = 7.69. Scores at Pierrefonds Polytechnical where S.D. = 19.36 would be extreme, that is they would be very different from the average with some very high or very low scores.
- % of pop - percentage that group is of the sample population.

TABLE 1a.

MEAN SCORES ON THE DIAGNOSTIC READING TEST
FOR HIGH SCHOOLS WHERE $\underline{n}$ IS GREATER THAN ($\geq$) 10 IN RANK ORDER

JOHN ABBOTT COLLEGE

<u>POPULATION</u>	<u>$\bar{X}$ /100</u>	<u>$\underline{n}$</u>	<u>S.D.</u>
1. Massey Vanier	72.08	12	12.82
2. Beaconsfield	69.77	89	10.53
3. Chateauguay	67.82	17	7.69
4. Lachine	67.78	18	11.59
5. Macdonald	66.44	52	12.16
6. St. Thomas	66.29	70	12.31
7. Howard Billings	66.15	13	13.82
8. Hudson	65.94	17	16.74
9. Vaudreuil Catholic	65.26	23	12.93
10. John Rennie	64.81	86	10.21
11. Dorval	64.31	35	10.19
12. Lindsay Place	64.00	58	11.27
13. Pierrefonds Comprehensive	62.44	68	12.71
14. Macdonald Cartier	61.55	11	12.16
15. John XXIII	60.82	22	9.64
16. Riverdale	60.67	48	14.09
17. Lasalle Catholic	60.30	10	13.58
18. Bishop Whelen	58.38	13	12.92
19. Pierrefonds Polytechnical	50.37	19	19.36

 $\bar{X} = 63.69$ $\underline{n} = 867$

TABLE 1b.

MEAN SCORES ON THE DIAGNOSTIC READING TEST
FOR HIGH SCHOOLS WHERE $\underline{n}$ IS GREATER THAN ($>$) 10 IN RANK ORDER
CHAMPLAIN COLLEGE

<u>POPULATION</u>	<u>$\bar{X}$ /100</u>	<u>$\underline{n}$</u>	<u>S.D.</u>
1. Chambly County	69.12	75	10.85
2. Richelieu Valley	66.15	81	14.43
3. Le Moyne D'Iberville	61.21	66	15.10
4. MacDonald Cartier	61.12	207	13.89
5. Centennial	60.78	123	14.11
6. Laval Catholic	56.63	27	15.57
7. Cardinal Newman	51.84	13	14.12
8. Thomas D'Arcy McGee	50.17	12	11.90
9. St. Pius $\bar{X}$	44.11	19	10.57

$\bar{X} = 60.29$

$\underline{n} = 813$

TABLE 1c.

MEAN SCORES ON THE DIAGNOSTIC READING TEST
 FOR HIGH SCHOOLS WHERE $\underline{n}$ IS GREATER THAN ($>$) 10 IN RANK ORDER
 COLLEGE DE ROSEMONT

<u>POPULATION</u>	<u>$\bar{X}$ /100</u>	<u>$\underline{n}$</u>	<u>S.D.</u>
1. Marguerite de la Jemmerais	60.00	20	12.05
2. Louis-Hébert	57.67	33	14.62
3. Collège de Eudistes	57.00	17	10.86
4. Polyv. Anjou	56.20	10	14.44
5. Polyv. Henri Bourassa	55.73	11	13.12
6. Polyv. Lucien Page	55.06	16	8.00
7. Louis Riel	53.62	13	13.90
8. Calixa Lavallee	52.14	22	12.38
9. Polyv. Pere Marquette	51.45	20	11.62
10. Curé Antoine Labelle	51.36	11	19.95
11. Louis Joseph Papineau	51.00	15	11.67
12. Secondaire Taillon	50.92	12	7.06
13. Joseph-François-Perrault	49.50	26	12.66
14. Stella-Maris	48.07	29	8.36
15. Polyv. Antoine de St. Exupery	46.06	17	13.43

$\bar{X} = 53.91$

$\underline{n} = 598$

COLLEGE PROGRAM DATA

A student's ability in a basic skill like reading is such a critical factor that it must be considered one of the major elements in determining academic success. Students who have had a history of academic success have a wide choice of vocation options, and it has long been thought that the most able choose the most rigorous academic disciplines. If this hypothesis is true, pre-university programs in Health Science, and Pure & Applied Science, should be selected by the students most qualified in basic skills, even without regard to high school grades or marks on provincial exams.

Table 2a, 2b, 2c present the mean scores on the Diagnostic Reading Test in rank order by college program for each college. Perusal of these tables will show that the above hypothesis is confirmed, at least in the English colleges, where Health Science and Pure & Applied Sciences are ranks one and two both at John Abbott and at Champlain. At John Abbott these scores are significantly higher at the .01 level than the scores of students in Social Sciences ($t = 3.28$, $df = 417$, $c.v. = 2.58$) and below (ranks 9-16). At Champlain the scores of students in Pure & Applied Sciences are significantly higher than the scores of students in the Social Sciences at the .05 level of significance ($t = 1.95$, $df = 427$, $c.v. = 1.65$) and below (ranks 5-10).

At Rosemont the same pattern does not emerge. "Biologie" and "Physique" are ranks 4 and 5.

TABLE 2a
 MEAN SCORES ON THE DIAGNOSTIC READING TEST
 BY COLLEGE PROGRAM IN RANK ORDER
 JOHN ABBOTT COLLEGE

<u>POPULATION</u>		<u>$\bar{X}$</u>	<u>n</u>	<u>S.D.</u>
1. Health Science	010	67.74	123	11.46
2. Pure & Applied Science	020	66.64	165	12.99
3. Forestry	190	66.21	14	7.36
4. Documentation Technology	390	64.78	9	7.50
5. Fine Arts	051	64.57	23	16.58
6. Planning Technology	382	64.00	9	9.98
7. Commerce	041	63.83	72	12.82
8. Social Sciences	030	62.37	254	13.68
9. Business Administration	410	61.59	44	12.15
10. Creative Arts	050	61.02	41	12.57
11. Nursing	180	61.00	32	9.20
12. Literature	060	60.50	20	13.76
13. Aircraft Maintenance	280	59.00	13	13.06
14. Dental Hygiene	111	58.69	13	14.90
15. Food Technology	120	58.46	11	8.84
16. Police Technology	310	55.39	23	20.02

$\bar{X} = 63.69$

n = 867

TABLE 2b

MEAN SCORES ON THE DIAGNOSTIC READING TEST
BY COLLEGE PROGRAM IN RANK ORDER
CHAMPLAIN COLLEGE

<u>POPULATION</u>		<u>$\bar{X}$</u>	<u>n</u>	<u>S.D.</u>
1. Health Science	010	65.43	120	13.52
2. Pure & Applied Science	020	62.94	122	15.56
3. General Arts	070	61.67	12	13.81
4. Social Science	030	59.77	307	14.29
5. Data Processing	420	59.28	36	13.99
6. Commerce	040	58.81	72	16.66
7. Language and Literature	060	58.49	33	15.22
8. Business Administration	410	56.00	47	15.72
9. Creative Arts	050	55.73	11	19.77
10. Secretarial Science	412	53.56	50	15.07

$\bar{X} = 60.29$

n = 810

TABLE 2c

MEAN SCORES ON THE DIAGNOSTIC READING TEST
BY COLLEGE PROGRAM IN RANK ORDER
COLLEGE DE ROSEMONT

<u>POPULATION</u>		<u>$\bar{X}$</u>	<u>n</u>	<u>S.D.</u>
1. Tech. Lab. Medicine	140	64.43	30	10.23
2. Histoire	330	58.59	17	11.20
3. Tech. Inhalothetic	141	57.02	43	13.86
4. Physique	203	56.35	63	12.30
5. Biologie	101	54.46	66	10.46
6. Tech. Recher. Psycho. Soc.	384	53.41	37	8.57
7. Psychologie	350	53.06	143	13.20
8. Science Administration	401	52.84	79	12.66
9. Informatique	420	51.96	24	11.18
10. Tech. Secretariate	412	47.09	34	8.67

$\bar{X} = 53.92$

$n = 562$

Only programs which include more than 10 students are represented in this table.

LANGUAGE GROUP DATA

The mother tongue of the student writing a reading test is a critical factor in his performance on that test. Tables 3a, 3b, and 3c present the mean scores on the Diagnostic Reading Test by language group for each college.

The results at John Abbott and Champlain show that students whose mother tongue is English score significantly higher at the .001 level than students whose mother tongue is French, (John Abbott $t = 5.20$, $df = 822$, $c.v. = 3.29$)(Champlain $t = 6.07$, $df = 688$, $c.v. = 3.29$) as well as students who speak any other language. This result is expected.

It should be noted that the percentage of English speaking students at John Abbott (86.61%) is much higher than at Champlain (74.00%). Champlain has a much larger immigrant population (14.18%) compared to John Abbott (4.85%). Champlain also has a larger Francophone population (11.82% at Champlain compared to 8.55% at John Abbott). It was thought that the difference in mean scores between the two colleges could be due to differences in the size of their non English speaking population. However, when the scores of English language students of both colleges are compared the scores of the students at John Abbott ($\bar{X} = 65.32$) are still significantly higher at the .01 level than the scores of the students at Champlain ($\bar{X} = 63.43$) ($t = 2.66$, $df = 1,343$, $c.v. = 2.58$).

TABLE 3a

MEAN SCORES ON THE DIAGNOSTIC READING TEST
BY LANGUAGE GROUP
JOHN ABBOTT COLLEGE

<u>POPULATION</u>	<u>X</u>	<u>n</u>	<u>S.D.</u>	<u>% of pop.</u>
English mother tongue	65.32	750	11.70	86.61
French mother tongue	54.50	74	17.58	8.55
Chinese or Japanese mother tongue	43.00	6	12.76	.69
Other mother tongues	52.47	36	16.75	4.16

* Note % of non English speaking students = 13.4

TABLE 3b

MEAN SCORES ON THE DIAGNOSTIC READING TEST
BY LANGUAGE GROUP
CHAMPLAIN COLLEGE

<u>POPULATION</u>	<u>$\bar{X}$</u>	<u>n</u>	<u>S.D.</u>	<u>% of pop.</u>
English mother tongue	63.43	595	13.85	74.00
French mother tongue	54.99	95	12.40	11.82
Chinese or Japanese mother tongue	46.31	32	17.43	3.98
Other mother tongues	50.07	82	15.15	10.20

* Note % of non English speaking students = 26.13

TABLE 3c

MEAN SCORES ON THE DIAGNOSTIC READING TEST
BY LANGUAGE GROUP
COLLEGE DE ROSEMONT

<u>POPULATION</u>	<u>$\bar{X}$</u>	<u>n</u>	<u>S.D.</u>	<u>% of pop.</u>
English mother tongue	56.75	4	10.24	00.67
French mother tongue	54.02	585	12.44	97.98
Other mother tongues	45.00	8	13.58	01.34

*Note % of non French speaking students = 2.01. The number of non French speaking students is so limited that no legitimate comparisons between language groups should be made.

The difference between French speaking students at John Abbott and Champlain is not significantly different ($t = .204$, $df =$, $cv 2.58$). Nor is there a significant difference between French speaking students at any of the three colleges (John Abbott $\bar{X} = 54.50$, Champlain $\bar{X} = 54.99$, Rosemont $\bar{X} = 54.02$), whether they write the exam in English or in French, their own mother tongue. At Rosemont, there are very few students whose mother tongue is not French (English $n = 4$, 0.67% of the population; other mother tongues $n = 8$, 1.34% of the population). Therefore no legitimate comparison between language groups can be made within the college.

It should be noted however that the scores of the French speaking students are significantly lower at the .001 level and beyond when compared to the scores of the John Abbott students ($t = 14.16$, $df = 1449$, $cv = 3.29$) or the Champlain students ($t = 8.50$, $df = 1396$, $cv = 3.29$) whether they write the test in their own language or in English. This may be due to many factors. First the French test was a translation of the English version. While the quality of the translation was good, the test contained many typographical errors which unfortunately were not corrected before printing. This could have contributed somewhat to the student's performance on the test. Secondly, the test was American, and was standardized on an American sample. It may have been culturally inappropriate for Francophone students. (In the opinion of the research team both Anglophones and Francophones thought the content of the test was culturally neutral.

and if there were a cultural bias it would be as much a problem for Anglophone students from Montreal as it would be for Francophone students from Montreal). It should be remembered however, that the French students were being compared to English students in Montreal in this case.

Third, it is possible that Francophone students do not have as much experience with tests of this type as do English students (although provincial exams in French are cast in a similar format). While it is certainly possible that the factors mentioned above affected the performance of the French students, in the opinion of the writer, it is unlikely, that these factors could have accounted for such a substantial significant difference. It must be considered therefore that the reading skills of the French students coming from the French public school system are very weak. The implications for the French Cegep system are serious and these will be discussed in detail in section VII of this report (Implications for Quebec - p.127)

It should be noted as well that while a substantial number of Francophone students attend English colleges (8.55% at John Abbott and 11.82% at Champlain), English students do not attend French colleges in similar proportions (0.67% at Rosemont). It is interesting that French students attending English colleges do as well on the test when it is in English as French students at Rosemont do when the test is in French. This suggests that French students attending English colleges are those with superior ability.

In General it appears that socioeconomic and ethnic factors seriously affects the level of performance in basic skills. The areas on the West Island surrounding John Abbott College are largely upper middle and middle class, as well 86.6% of the sample population speak English as a first language. The areas on the South Shore surrounding the St. Lambert-Longueuil Campus of Champlain are middle and working class districts. Only 74.0% of the sample declare their mother tongue in English. The area surrounding Collège de Rosemont is middle and working class. The significant differences in reading score scores observed may be due to sociological factors. If this is the case this may have important implications for the development of compensative reading programs at the various colleges. This issue will be discussed in Section VII (Implications for Quebec, p.127).

FAMILY DATA

Current theoretical research (Zajonc, 1976)¹ in the field of intellectual development suggests that family configuration may be an important factor in the eventual ability of family members to perform intellectual tasks. Reading skills are closely correlated with intellectual performance of all kinds.

In this study Zajonc's "Confluence Model" of intellectual development was used to collect and analyze the data for 2309 Quebec college students in order to determine whether these findings would hold true for a Canadian sample. Since the population was approximately 74% Anglophone and 26% Francophone, it was considered an appropriate Canadian sample for this purpose, although it is recognized that the findings may be typical of Quebec only.

Zajonc's findings are based on analysis of the intellectual performance of four large populations, (the Netherlands [$n = 400,000$]; United States [$n = 800,000$]; France [$n = 100,000$]; Scotland [$n = 70,000$]). His research shows that scores generally decline with increasing family size, and that within each family size they decline with birth order. The only child, however shows a distinct discontinuity with the family size effect. In two out of the four samples, the only children have lower averages than children from families of two, and in American and Dutch data lower than families of three. As well the last born child in families of all sizes shows the lowest level of intellectual performance.

¹Zajonc, R.B., Family Configuration and Intelligence, Science, Vol. 16, April 1976. pp. 227-236.

FAMILY SIZE

Table 4 and Table 6d. show that the Quebec data generally confirms Zajonc's thesis, that scores decline with increasing family size. This is particularly true at Rosemont where the mean scores for children in one child families is (56.34) compared to (51.99) for children of 5+ child families, and at Champlain where the mean score for children of one child families is (62.40) compared to (57.30) for children of 5+ child families.

This thesis holds when the sample provides a population that is normally distributed on socioeconomic variables. Kennett (1973; 1970)² demonstrates that there is a relationship between scores on intelligence tests and socioeconomic status. It may be that upper middle class populations are able to effectively counter the disadvantages of late born children through economic compensation. This factor emerges in the John Abbott data where 5th borns in 5+ children families are not at a disadvantage. These children may also be the beginning of second families. As well, they are not necessarily the last born and thus they may not suffer from the "non-teacher" deficit (the lack of the opportunity to teach another) which affects last born and only children.

² Kennett, K.F., Measured Intelligence, Family Size and Socio-Economic Status, The Alberta Journal of Educational Research Vol. 19, No. 4, Dec. 1973 p. 314-320.

Kennett, K.F., Intelligence, Family Size and Socio-Economic Status, Journal of Biosocial Science, Vol. 2, 1970, p.227-236.

TABLE 4

MEAN SCORES ON THE DIAGNOSTIC READING TEST
BY FAMILY SIZE
JOHN ABBOTT/CHAMPLAIN/ROSEMONT

<u>JOHN ABBOTT</u>	<u>$\bar{X}$</u>	<u>n</u>	<u>% of pop.</u>
1 child family	62.21	42	4.84
2 child family	64.45	216	24.91
3 child family	64.57	287	33.10
4 child family	63.53	174	20.07
5+ child family	61.71	148	17.07
<u>CHAMPLAIN</u>			
1 child family	62.40	35	4.38
2 child family	61.24	170	21.25
3 child family	61.75	283	35.38
4 child family	60.93	153	19.13
5+ child family	57.30	157	19.13
<u>ROSEMONT</u>			
1 child family	56.34	33	5.55
2 child family	54.94	135	22.69
3 child family	55.38	133	22.35
4 child family	53.42	120	20.17
5+ child family	51.99	173	29.08

BIRTH ORDER

Zajonc's thesis suggests that within each family size scores decline with birth order. Tables 5a, 5b, 5c, and 6d, show that this part of the thesis is also generally confirmed with the Quebec data. This is particularly true at Champlain and Rosemont where scores decrease for the later born and where it is a particularly serious disadvantage in families of 5+ children to be among the latest born.

There are however some discrepancies in this data. At John Abbott for 3rd born children in 4 children families ($\bar{X} = 66.59$) and in 5th born children in 5+ children families; at Champlain in 4th born children in families of 5+ children; and at Rosemont in 3rd born children in families of 3 children, and 4th born children in families of 4 children. It may be that these late born children are also the beginning of second families. Zajonc (1976) suggests that the child who is born many years after the next to last enters into an environment of intellectually more mature children. If this is true these children would have many of the advantages of first borns in that they would have their older siblings as well as their parents as teachers. Also they may not be the last born, and as such may not suffer from the "non-teacher" deficit.

TABLE 5a

MEAN SCORES ON THE DIAGNOSTIC READING TEST

BIRTH ORDER DATA

JOHN ABBOTT COLLEGE

<u>Birth Rank</u> <u>No. of Siblings</u>	<u>1st born</u>	<u>2nd born</u>	<u>3rd born</u>	<u>4th born</u>	<u>5th+ born</u>
1 child	62.21 <u>n</u> = 42				
2 children	64.72 <u>n</u> = 133	64.02 <u>n</u> = 83			
3 children	65.43 <u>n</u> = 127	64.17 <u>n</u> = 75	63.64 <u>n</u> = 85		
4 children	62.38 <u>n</u> = 53	61.96 <u>n</u> = 44	66.59 <u>n</u> = 41	63.64 <u>n</u> = 36	
5+ children	65.90 <u>n</u> = 20	62.68 <u>n</u> = 28	61.00 <u>n</u> = 30	55.10 <u>n</u> = 29	64.20 <u>n</u> = 41
$\bar{X}$	64.41	63.51	63.69	59.83	64.20
<u>n</u>	375	230	156	65	41

 $\bar{X}$ total population = 63.69n total population = 867

TABLE 5b

MEAN SCORES ON THE DIAGNOSTIC READING TEST

BIRTH ORDER DATA

CHAMPLAIN COLLEGE

<u>Birth Rank</u> <u>No. of Siblings</u>	<u>1st born</u>	<u>2nd born</u>	<u>3rd born</u>	<u>4th born</u>	<u>5th + born</u>
1 child	62.40 <u>n</u> = 35				
2 children	61.87 <u>n</u> = 105	60.22 <u>n</u> = 65			
3 children	61.28 <u>n</u> = 116	63.56 <u>n</u> = 98	59.97 <u>n</u> = 69		
4 children	60.94 <u>n</u> = 51	60.59 <u>n</u> = 42	61.62 <u>n</u> = 39	60.33 <u>n</u> = 21	
5 + children	58.63 <u>n</u> = 33	52.64 <u>n</u> = 28	57.26 <u>n</u> = 27	63.46 <u>n</u> = 28	54.51 <u>n</u> = 41
$\bar{X}$	61.27	60.79	59.90	62.12	54.86
<u>n</u>	340	234	135	49	42

 $\bar{X}$ total population = 60.62n total population = 800

TABLE 5c

MEAN SCORES ON THE DIAGNOSTIC READING TEST

BIRTH ORDER DATA

COLLEGE DE ROSEMONT

<u>Birth Rank</u> <u>No. of Siblings</u>	<u>1st born</u>	<u>2nd born</u>	<u>3rd born</u>	<u>4th born</u>	<u>5th+ born</u>
1 child	56.36 <u>n</u> = 34				
2 children	55.64 <u>n</u> = 77	54.00 <u>n</u> = 58			
3 children	58.13 <u>n</u> = 45	52.20 <u>n</u> = 40	55.44 <u>n</u> = 48		
4 children	55.83 <u>n</u> = 24	52.00 <u>n</u> = 31	50.33 <u>n</u> = 27	55.24 <u>n</u> = 38	
5+ children	56.75 <u>n</u> = 16	54.53 <u>n</u> = 19	48.36 <u>n</u> = 25	52.28 <u>n</u> = 36	51.42 <u>n</u> = 77
$\bar{X}$	56.45	53.16	52.29	53.81	51.42
<u>n</u>	195	148	100	75	77

 $\bar{X}$ total population = 53.95n total population = 595

TABLES 6a, 6b, and 6d summarize the family data.

ONLY CHILDREN

In Zajonc's data although scores decline with increasing family size, and within each family size they decline with birth order there is a distinct discontinuity with the only child. This phenomena is observed at John Abbott where the mean score for only children (62.21) is lower than the scores for a 4 child family.

Zajonc explains the low scores of only children by suggesting that this may be due to a "non-teacher deficit ". That is both only children and last born children have fewer opportunities to teach. He suggests that those who have to explain things to others can see from others' reactions whether the explanation was well understood, and will be prompted to improve the explanation, with the consequence that his or her own understanding will be improved. Zajonc suggests that active participation in an intellectual process is decidedly more instructive than passive participation. Only children and last born children do not usually have the chance to serve as intellectual resources, and therefore suffer from the "non-teacher" deficit.

At Rosemont and at Champlain only children are not at a disadvantage. Table 4 shows that in these populations it is a distinct advantage to belong to a one child family compared to a family of any other size and that the advantage increases as family size increases.

This may be due to the fact that in immigrant and working class families the limited resources available may be concentrated to the advantage of an only child. When these resources are spread over a large number of children as they are in 5+ families the disadvantage is clear. As well, ethnic variables, in immigrant groups, and groups where there are many families with a large number of children, (49.3% of the families at Rosemont have 4 or more children) may affect the scores. In these groups, children of neighbors and relatives live close by and are readily accessible as students for only children.

This may also explain why late born children in families of 5+ at Champlain, and families of 3 and 4 children at Rosemont are not as low as could be expected. These children have other children available close by as students and therefore they do not suffer from the "non-teacher" deficit. This would not be true for the only child in the upper middle class areas around John Abbott where small families are the most common (62.9% of the subjects come from families of 3 children or less) and where houses are separated by large lawns and spaces between them. An only child in this environment may not have access to the opportunity to teach.

ONE PARENT CHILDREN

According to the confluence model the intellectual environment of the child is directly dependent on the number of adults available in his immediate environment. It follows that a one-parent home constitutes an inferior intellectual environment and should result in intellectual deficits. The data at John Abbott and Rosemont is in accord with this hypothesis although the differences are not significant

(John Abbott - $\bar{X}$ 1 par. = 61.76, $\bar{X}$ pop. 63.69) (Rosemont - $\bar{X}$ 1 par. = 52.37; $\bar{X}$ pop. = 53.95). At Champlain however, the mean for one parent children is higher than the average score for the population (Champlain - $\bar{X}$ 1 par. = 61.97; $\bar{X}$ pop. 60.29). No information is available as to the length of time only one parent has been available. It is interesting to note that the percentage of one parent children at Rosemont (16.97% of the population) is twice as large as the percentage at John Abbott (8.65% of the population) and Champlain (7.26% of the population).

TWINS

The confluence model predicts that intellectual environment and therefore reading scores should decline with birth order and family size, but that these negative effects can be mediated entirely by age spacing between siblings. Therefore, the greater the gap in age between children the more advantageous for the intellectual environment of the family. It should follow that when there is not gap, as with twins, this should result in an intellectual deficit. This hypothesis is confirmed at Champlain ($\bar{X}$ twins = 54.86, $\bar{X}$ pop. 60.29) where the difference is significant at the .01 level. ($t = 3.28$, $df = 802$, $cv = 2.58$). At Rosemont the difference is in the right direction ($\bar{X}$ twins = 50.0, $\bar{X}$ pop. = 53.95) but is not significant. At John Abbott the mean for twins is substantially higher than the mean for the whole sample ($\bar{X}$ twins = 70.77, $\bar{X}$ pop. 63.69). This may be due to the effect of the socioeconomic level where upper and upper middle class parents are able to compensate for the negative effect of age spacing through

economic means. It may be, that in these families the advent of twins provides household help and therefore adds an additional adult to the children's intellectual environment. In any case the small number of twins in the sample, and the fact that we have no information about the birth order of these twins make a definitive answer difficult.

SEX

Because, the confluence model is based on the relationship between the number of adults in the intellectual environment and the number and age gap between siblings without regard to sex, no difference due to sex would be predicted. At John Abbott ($\bar{X}$ males = 64.04; $\bar{X}$ females = 63.29) and Rosemont ($\bar{X}$ males = 54.87; $\bar{X}$ females = 53.18) no significant differences are observed between males and females. At Champlain the scores of males are significantly higher at the .01 level ($t = 2.62$, $df = 811$, $cv = 2.57$). This may be due to the additional stress to succeed placed on males in immigrant populations.

YOUNGEST CHILD

According to Zajonc's thesis, scores on tests of intelligence decline with birth order. Therefore the youngest child should show an intellectual deficit. In addition youngest children may suffer from the "non-teacher" deficit when compared to the rest of the sample population. At John Abbott the scores are in the right direction and fall below third born children. However when the scores are compared to the mean of the population ($\bar{X}$ pop. = 63.69; $\bar{X}$ youngest = 63.37) the difference is not significant. At Champlain the scores are also in the right direction ($\bar{X}$ pop. = 60.29; $\bar{X}$ youngest = 59.77) and fall below third borns, but

the difference is not significant. At Rosemont the score for youngest children is above the mean for the population ($\bar{X}$ pop. = 53.95; $\bar{X}$ youngest = 54.71). This may be due to socioeconomic factors in that large families may be better off economically by the time the younger child is born, mature siblings may add both to intellectual environment and provide additional economic support by working. As well, ethnic variables may provide other children to teach in close proximity thus mediating the negative effect of the "non-teacher" deficit.

TABLE 6a

MEAN SCORES ON THE DIAGNOSTIC READING TEST

FAMILY DATA

JOHN ABBOTT COLLEGE

<u>POPULATION</u>	<u>$\bar{X}$</u>	<u>n</u>	<u>S.D.</u>	<u>% of pop.</u>
only children	62.21	42	16.12	4.84
twins	70.77	13	9.98	1.50
youngest child	63.37	223	12.47	25.72
one parent child	61.76	75	16.17	8.65
females	63.29	404	12.22	46.60
males	64.04	463	13.97	53.40
first borns	64.41	375	13.47	43.25
2nd borns	63.51	230	12.89	26.53
3rd borns	63.69	156	11.99	17.99
4th borns	59.83	65	13.98	7.50
5th + borns	64.20	41	15.37	4.73

* see table 4. for birth order data.

$\bar{X}$ total population = 63.69

n total population = 867

TABLE 6b

MEAN SCORES ON THE DIAGNOSTIC READING TEST

FAMILY DATA

CHAMPLAIN COLLEGE

<u>POPULATION</u>	<u>$\bar{X}$</u>	<u>n</u>	<u>S.D.</u>	<u>% of pop.</u>
only children	62.40	35	13.96	4.31
twins	54.86	21	13.04	2.58
youngest child	59.77	200	14.31	24.60
one parent child	61.97	59	14.91	7.26
females	58.79	373	15.02	45.88
males	61.56	440	15.01	54.12
first borns	61.27	340	15.32	41.82
2nd borns	60.79	234	13.59	39.85
3rd borns	59.90	135	15.37	16.61
4th borns	62.12	49	14.43	6.03
5th + borns	54.86	42	16.92	5.17

$\bar{X}$ total population = 60.29

n total population = 813

TABLE 6c

MEAN SCORES ON THE DIAGNOSTIC READING TEST

FAMILY DATA

COLLEGE DE ROSEMONT

<u>POPULATION</u>	<u>$\bar{X}$</u>	<u>n</u>	<u>S.D.</u>	<u>% of pop.</u>
only children	56.56	34	9.50	5.71
twins	50.00	13	8.92	2.18
youngest child	54.71	189	13.03	31.76
one parent child	52.37	101	13.29	16.97
females	53.18	334	12.49	56.13
males	54.87	261	12.37	43.87
first borns	56.45	195	11.31	32.77
second borns	53.16	148	11.74	24.87
3rd borns	52.29	100	13.01	16.81
4th borns	53.81	75	12.79	12.61
5th+ borns	51.42	77	14.37	12.94

$\bar{X}$ total population = 53.95

n total population = 595

SUMMARY - FAMILY DATA - WHEN THE THREE COLLEGES ARE COMBINED

Table 6d. presents the family data when the scores of 2275 subjects in the 3 colleges are combined. When the larger population is considered the uneven effects and the discrepancies probably caused by socioeconomic and ethnic variables are ironed out. The resemblance to Zajonc's data, is striking. While differences are often neither large nor significant the directionality of the scores are almost exactly what the confluence model theory would predict.

1) Scores generally decline with increasing family size.

The combined data bears this out except for the discrepancy in 2 and 3 children families.

2) Only children suffer from the "non-teacher" deficit.

The combined data bears this out. However the deficit is less than expected probably due to the socioeconomic and ethnic factors at Champlain and Rosemont.

3) Within each family size, scores decline with birth order.

The combined data from first borns to fifth+ borns bears this out.

4) Twins have the shortest possible gap between successive siblings and suffer from lack of age spacing.

Twins score substantially lower on tests of

intellectual performance than do non-twins.

The combined data shows twins substantially lower than the mean for the population ($\bar{X}$ pop. = 59.93; $\bar{X}$ twins = 57.92). As well, they score lower than 4th borns in the sample population.

- 5) In addition to the deficit of being low in the birth order youngest children suffer from the "non-teacher" deficit.

The combined data shows the mean of the youngest child below the average for the population.

- 6) The intellectual environment is directly related to the number of adults in the home. Therefore the one-parent child suffers from an inferior intellectual environment.

The combined data shows one-parent children score substantially below the mean for the population ($\bar{X}$ pop. = 59.93; $\bar{X}$ one-par. = 57.78)

The relationship between the Quebec data and the predictions of the confluence model hypothesis is most interesting. While data of this type must always be considered with caution, the relationship suggests that further study of these phenomena in the Quebec population would

TABLE 6d

MEAN SCORES ON DIAGNOSTIC READING TEST

FAMILY DATA

TOTAL SAMPLE

<u>POPULATION</u>	<u>$\bar{X}$</u>	<u>n</u>	<u>% of pop.</u>
only children	60.54	111	4.88
twins	57.92	47	2.07
youngest child	59.52	612	26.90
one-parent child	57.78	235	10.33
females	58.74	1111	48.84
males	61.05	1164	51.12
first borns	61.53	910	40.00
2nd borns	59.97	612	26.90
3rd borns	59.47	391	17.19
4th borns	58.03	189	8.31
5th + borns	55.60	160	7.03
1 child family	60.54	111	4.88
2 children family	60.94	521	22.90
3 children family	61.70	703	30.90
4 children family	59.93	447	19.65
5+ children family	56.74	478	21.10

$\bar{X}$ total population = 59.93

n total population = 2275

be most worthwhile. Most importantly the relationship of this data to the data collected from such a large international sample (the Netherlands - $n = 400,000$; Scotland - $n = 70,000$; France - $n = 100,000$; United States - $n = 800,000$) adds weight and validity to the findings of this study.

PARENTS' EDUCATION

It has long been considered that parents' education seriously affected the intellectual achievement of their children. It has been suggested that the enriched intellectual environment provided by educated parents would result in superior performance on intellectual tasks by their offspring. This would be particularly true when parents went beyond high school and voluntarily pursued a university education.

The data presented in Table 7 bears out this phenomenon. At John Abbott where the education level of the parents is the highest the reading scores are also the highest. (Education - father - 2.8; education - mother - 2.3; $\bar{X}$ pop. = 63.67). These scores represent some university education for both parents (see table 7 for explanation). The scores are also significantly different from those at Champlain ($t = 2.66$ $df = 1,343$ $cv = 2.58$) at the 0.1 level even when only English speaking students are compared. Both the scores at John Abbott ($t = 5.20$ $df = 822$ $cv = 3.25$) and the scores at Champlain ($t = 6.07$ $df = 688$ $cv = 3.29$) are significantly better than the scores at Rosemont well beyond the .001 level. The education levels at Champlain (2.4 father's education;

2.1 mother's education; $\bar{X}$ pop. = 60.29) imply some university education, the scores at Rosemont (2.1 father's education; 1.9 mother's education; $\bar{X}$ pop. = 53.95) indicate that these parents have little education beyond high school. While the quality of the French test must certainly be considered (discussed on p.24) it appears that the education of the parents seriously affects the performance of their children on an intellectual task.

Even more interesting perhaps is the fact that within each college the education of the mother, and the education of the father is significantly correlated with the reading scores of the students at the .001 level for John Abbott and Champlain, at the .008 and .107 level at Rosemont (see Table 7)*. While no definitive statements can be made here since the correlations are low, a very clear trend is visible, particularly when the data is consistent in each of the three colleges and with such a substantial sample population. These findings have important implications for the future of education in Quebec for both the Anglophone and Francophone populations. The implications will be discussed later in this report (Section VII Implications for Quebec).

* Note: - Table 7 also presents the mean age of the parents at each college.

TABLE 7

COMPARATIVE DATA

PARENTS' EDUCATION AND READING SCORES

POPULATION	n	$\bar{X}$ Reading Score	Educ. Father	Educ. Mother	Age Father	Age Mother	Corr. Educ. Father	Signif. level	Corr. Educ. Mother	Signif. level
John Abbott	867	63.67	2.8	2.3	47.6	45.0	$r = .12/$	$S = .001$	$r = .12/$	$S = .001$
Champlain	813	60.29	2.4	2.1	46.9	44.2	$r = .13/$	$S = .001$	$r = .22/$	$S = .001$
Rosemont	598	53.91	2.1	1.9	48.6	46.4	$r = .11/$	$S = .008$	$r = .07$	$S = .107$

r = correlation
 S = significance level

Education scores:

- 1 = grade 7 completed
- 2 = high school completed
- 3 = some university education
- 4 = university graduate

IV COGNITIVE DEVELOPMENTAL VARIABLES

Cognitive developmental variables seriously affect the intellectual performance of young adults. In order to better understand these factors the following studies were undertaken by the research team.

LOCUS OF CONTROL

Some people believe that their destiny is controlled by external forces in the environment. These are called "externals". Others feel they are personally in control of what happens to them. These are called "Internals".

Research questions:

- 1) Are internally controlled people better performers on intellectual tasks?
- 2) Does the reading program which teaches self-management of behavior affect the locus of control phenomena - that is does it make people feel they are more in control of their behavior?
- 3) If this program affects locus of control, do internals become better readers?

The Rotter Scale for locus of control was used to measure these phenomena in pilot studies at John Abbott and Champlain.

STUDY BEHAVIOR

It is well known among educators that poor students have inefficient study habits. These habits are ineffective in 2 ways:

- A. They do not have effective and efficient strategies to approach academic tasks (quality).

- B. They do not spend sufficient time studying and working at their academic tasks (quantity).

Research questions:

- 1) Can self management training which is part of this program improve the quality and quantity of study habits of the students involved?
- 2) To what extent would improvement in study skills affect a student's performance in reading?
- 3) To what extent would improvement in study skills affect a student's general academic performance?

The survey study habits and attitudes (S.S.H.A.) was used to measure this phenomenon at John Abbott and Champlain.

PERCEPTUAL COMPETENCE

Perceptual competence may be closely related to reading skills.

Research questions:

- 1) Is perceptual competence related to reading skills?
- 2) Does improvement in reading skills affect perceptual competence?

Tests of perceptual competence were used at Rosemont to study these phenomena.

LANGUAGE SKILLS

Language skills may be closely related to reading skills.

Research questions:

- 1) Are language skills related to reading skills?
- 2) Does improvement in reading skills affect language proficiency?

The test in language proficiency devised at Rosemont has been used to study these phenomena in French language students.

LATERAL PREFERENCE

Hemispheric preference in eyedness, handedness, footedness, and earedness may affect performance on intellectual tasks. Crossed preference may affect reading skills.

Research questions:

- 1) Does lateral preference affect performance on an intellectual task?
- 2) Do crossed preference subjects score lower on reading tests?

A measure of lateral preference developed at the University of British Columbia has been used to measure lateral preference at John Abbott and Champlain and the experimental high schools. A French version of this measure has been prepared so that it may be used at Rosemont in 1977-78. (The English and French versions of this measure are included in Appendix B, p.159).

ATTITUDE TOWARDS SCHOOL AND THE SELF AS A LEARNER

It has been shown that poor readers have a negative attitude towards school and towards themselves as learners. They often show dissatisfaction and distress at school.

Research questions:

- 1) Does increased competence in reading affect attitude towards school and the self as a learner?
- 2) Does participation in this program affect these attitudes?

This phenomena has been studied at the high school level using a measure of school satisfaction and distress devised by the writer as well as a system of interviews of participants and control subjects. (Measure included in Appendix B in English and French, p.159).

As well a questionnaire in "Attitudes Towards Reading" (ESTES) has been used both at the high school and college level. This test has been translated into French and is now ready for use at Rosemont in 1977-78. (This test in English and French is included in Appendix B, p.159).

These studies are still in the pilot stage, and no definitive results are yet available. It is hoped that they will continue to be explored by the researchers as their implications for intellectual achievement may be far reaching. In this report the studies have been described and a selection of instruments used are included in Appendix B. Some of these studies such as attitudes towards school have been studied in other ways as part of the program itself. This will be discussed in Section VI- Results, as well as in the sections of the reports from individual colleges.

The researchers have designated the following areas of data for further study and analysis. As well, they will continue to share the findings of the 1976-77 research through presentations at conferences and through written publications in Scientific Journals. The specific researchers indicated are primarily responsible for the following areas of study:

<u>DATA</u>	<u>RESEARCHERS</u>	<u>PLACE</u>
General Program	Schwartz Woodruff, Kerwin Grubert	Vancouver, San Francisco Houston "
Readability	Schwartz, Stirling Grubert Woodruff, Kerwin	John Abbott " Champlain
Confluence Model	Schwartz, Woodruff Michaud	JAC/Champlain/Rosemont "
Study Behavior	Stirling, Woodruff Kerwin	JAC/Champlain
Lateral Preference	Schwartz	JAC/Champlain/Rosemont
Attitude to Reading	Woodruff	JAC/Champlain
Peer Tutoring	Kerwin, Michaud Belzile	Champlain/Rosemont "
Perceptual Competence	Michaud	Rosemont
French Mother Tongue	Michaud, Belzile	Rosemont
Test Validation to translation	Michaud, Belzile	Rosemont
Locus of Control	Chinmaya, Stirling	John Abbott

V DESCRIPTION - PROGRAM TO DEVELOP READING EFFICIENCY
AND ACADEMIC EFFECTIVENESS IN COLLEGE STUDENTS

THEORY AND RATIONALE

This program is based on the premise that active participation in the intellectual process is a vastly superior method in effective learning than is passive participation.

Students in the public school system in Canada have been taught since kindergarten to be passive participants in the learning process. They are expected to sit in their seats and listen to their teachers. They are told what to learn. Generally the procedures involve listening to the teacher and carrying out instructions exactly as specified. Students are rewarded by good grades and teacher's approval when they quietly go about the business of following these instructions. After eleven years of this type of training, college students expect teachers to teach ("Perform"). They expect to play the role of passive observer to that teaching performance and to memorize the information the teacher implies is important. As a result, college teachers observe that students do best when tests are in a multiple choice format and the students can rely on memory and guessing rather than on critical thinking. The skills of critical thinking and using the written language to express this level of thought are uniformly poor, with only minor exceptions, throughout the post secondary student population in Canada. This unfortunate phenomena is not surprising when one considers that critical thought

develops through practice and there is very little practice available in Canadian schools.

In spite of this, psychologists have known for a long time that children learn through active interaction with their environment (Piaget, 1970).⁵ Perhaps one of the reasons that the rate of learning in children slows down once they begin school is due to the passive learning phenomenon.

During the last 300 years, North America has produced a phenomenal amount of critical thinkers who as scientists and entrepreneurs created the most advanced technological and cultural civilization in the history of mankind. While it is recognized that what follows is conjecture, it may be considered that North Americans up to the last 30 years or so were educated in "One room school houses" where it was common practice for older children to teach younger children. Zajonc (1976) suggests that those who explain things to others can see from others responses whether the explanation was well understood, if it is not, they will be prompted to improve the explanation, with the consequence that his or her own understanding will be improved. It is also common knowledge among educators themselves, at all levels, that to teach is a most effective way to learn. Perhaps North Americans were so successful as adults because as students they learned to teach as a natural part of their learning process. Thus they were consistently active learners.

It has therefore been the basic rationale of this program to teach students to teach so that they may learn actively and

⁵ Piaget, J. Piaget's Theory - In B.H. Mussen (Ed.) Carmichael's Manual of Child Psychology (Vol.1) New York, Wiley, 1970.

effectively. Perhaps a specific example of how that process works in this program would now be in order.

AN EXAMPLE OF THE THEORY IN PRACTICE

College students are asked in an early class in Reading Efficiency to find the main idea of a short prose passage on college level material. Since this is an academic task common to most disciplines students approach the task readily.

Some of the students are successful in identifying the main idea and some are not.

The students who were successful are then asked to explain how they went about finding the correct answer. Very few students are able to explain their strategy. It appears, that often their approach is "hit and miss" and even students who are consistently successful have so internalized the process that they cannot explain even to themselves how they go about their task.

In order to remedy this situation students are asked to do the same task, that is, to find the main idea on material that is at the grade 5-7 level of readability. All college students appear to be able to do this task successfully. They are then taught specific strategies to teach this skill to others

from TRICKS OF THE TRADE p.9

The main idea is often expressed in the topic sentence.

This sentence is usually found at the beginning of the paragraph.

It's function is to introduce the idea to be discussed.

Begin by looking at the topic sentence.....

The students are then asked to internalize (memorize) this strategy in order to teach their clients. They subsequently get a great deal of practice in working with their clients on simple material where they have

to articulate the strategy as well as find the correct answer themselves many times. Under these circumstances they are actively interacting with the material and it does not take long for them to make the instructions part of their own learning strategy.

At a later class in Reading Efficiency, students are again asked to find the main idea of a prose passage on college level material. By this time all the students have a model with which to approach the task. Even when the reading level is more difficult they know how to deal with the problem. Invariably a large proportion of the students are now successful. They are then given the opportunity to practice these skills on college level material.

Their new strategies are also immediately relevant and useful in every subject they are taking. Students are quick to realize and to point out to the teachers and each other how much more successful they are in their studies than they previously thought possible.

This new success creates a positive attitude towards the learning process in general and towards this program in particular. They work at their tasks with renewed vigor as they have higher expectancy and hope for their future academic success.

In this program the most important strategies to approach reading tasks are specifically outlined for the students. These strategies include:

- 1) Finding the main idea.
- 2) Detailing.
- 3) Sequencing.
- 4) Generalizing.
- 5) Reading for Accuracy.
- 6) Speed techniques.
- 7) Reading critically.
- 8) Analyzing a novel; short story; biography.
- 9) Vocabulary development
- 10) Summarizing.

- 11) Strategies for test taking.
- 12) Organization skills.
- 13) Note taking.

The students are then taught to teach these skills to junior high school students.*

THE COURSE - LINGUISTICS AND THE READING PROCESS (603-104)

In addition to the practice they get in tutoring, and in parallel reading the same material as their client, college level strategies and approaches to academic tasks, like writing term papers, taking notes, etc., are being taught in the course "Linguistics and the Reading Process". Students are asked to use as many of these procedures as they can with their young clients and this time they must teach themselves to teach the skills.

Thus the program in reading provides the "High Risk" college students with

- 1) strategies to approach the academic tasks.
- 2) Training in teaching these strategies to others.
- 3) Practice
 - a) in teaching the strategies.
 - b) in reading at both high school and college levels.

* Note:

Junior high school students are selected as clients so that the college students will be able to work at a level that is easy enough for them to be consistently successful. At the same time the tasks are similar enough to college tasks to make this a useful learning experience. Several students at Champlain and Rosemont have experimented with peer tutoring and the results will be reported in Section V.

MOTIVATION AND LEARNING THEORY

A student's attitude towards the learning process and towards himself as a learner is a critical factor in determining his success or failure. Students who are poor readers at both the high school and college levels have experienced many failures as learners throughout their school career. These failures have given them poor self-images as learners and negative attitudes towards the school and the learning process in general. They have developed avoidance strategies to reading, studying and working on academic tasks. Consequently, they develop poor study habits which mitigate against their future success at college. These students are therefore very vulnerable to failure and to dropping out of school.

Often no matter how much they want to succeed they are unable to deal with their own avoidance strategies and poor study habits. In order to counter this phenomenon in "High Risk" students this program is based squarely on the art and technology of behavior management. This technology, which has been adapted and designed specifically for this reading program by the author, is the underpinning of the entire program. While it is possible for average students to benefit considerably from the learning-to-teach process alone, it is doubtful that this process would be sufficient for "High Risk" students either at the high school or college level.

THE COURSE - THE DEVELOPMENT OF THE PERSON (350-901)

Consequently, in the course the Psychology of Personal Development, students are taught:

- 1) the principles of learning
- 2) reinforcement theory
- 3) behavior management
- 4) cognitive development
- 5) emotional development
- 6) motivation theory

with the express purpose of using these theories to monitor the reading program of their clients. At the same time they are taught:

- 7) self management technology.

In addition to actively practicing this theory with their clients they are asked to learn to manage and control their own behavior using the same principles. Thus they learn a new technology to help them create a more positive attitude to learning in others. This invariably results in a more positive attitude for themselves. Most importantly as they learn to modify the avoidance strategies to learning in others, they learn to deal with their own avoidance strategies constructively and modify these attitudes in themselves. As they learn to increase the stamina for study and reading in others, they learn to increase their own stamina. As they learn to modify the poor study habits of another, they learn to modify their own poor study habits. As they see another succeed by their teaching, they are spurred on to practice and to work for their own success.

This program is an intense personal experience which helps to create a new attitude towards the whole process of learning in the "High Risk" college student. It is this new attitude which is critical to the ongoing value of the program. It is hypothesized that it could not properly occur without both learning and using the technology of behavior management.

DESCRIPTION OF THE EXPERIMENTAL PROGRAM

The theory and rationale of this program implies that students in the experimental groups at each college will take the total package which will include:

1) a psychology course

The Development of the Person (350-901)

Where they will learn principles of learning and behavior management.

2) an English course

Linguistics and the Reading Process (603-104)

Where they will learn strategies for efficient reading.

3) tutoring training (the 1st 5 weeks of the semester in each course - 9 hours in psychology and 6 hours in English)

Where they will be trained as reading tutors and contingency managers.

4) Fieldwork - tutoring a client.

Each student will be matched with a client - a high school student in grades 7-9 whom he will meet at the high school for 1 hour a week. (in addition to class time) for 10 weeks. During that time the college student will use program materials:

- to diagnose the student's reading weaknesses.
- to design an individual reading program for the client based on the gaps in his particular hierarchy of skills.
- to monitor a reading contract for the client using the principles of behavior management.
- to systematically modify the client's expressed verbal responses to foster more positive attitudes to the reading process and to the self as a learner.

At the end of the program the college student will write a detailed report on his client based on his weekly observations, and will plan an intermediate program which his client can carry on independently over the spring and summer months.

THE CONTROL GROUPS

At each college parts of the program will be employed with several control groups in order to determine the power of each of the 4 components described above, as well as, to provide some comparison data with which to analyze the effectiveness of the program. Therefore groups 2, 3, 4, 7, 8 should be considered control groups. Since groups 1 at John Abbott, and groups 5 and 6 at Champlain, receive the full treatment they should be considered the experimental groups. At Rosemont, all groups are experimental in that the preliminary investigation is meant to determine the effectiveness of each of the variables employed.

RESEARCH DESIGN

JOHN ABBOTT/CHAMPLAIN

<u>COLLEGE</u>	<u>GROUP</u>	<u>VARIABLES INCLUDED</u>	<u>n</u>
John Abbott	1	Psych, Eng, T.T., F.W.	29
John Abbott	2	Psych, T.T., F.W.	16
John Abbott	3	Psych	19
John Abbott	4	Lectures - attention placebo	12
Champlain	5	Psych, Eng, T.T., F.W.	24
Champlain	6	Psych, Eng, T.T., F.W.P.	20
Champlain	7	Eng, T.T., F.W.	28
Champlain	8	Attention placebo	11

KEY n = number in group.

NOTE: All groups were expected to have 25 students.
Registration procedures at the colleges did not
allow this to occur as planned.

Psych - Psychology (350-901)
Eng - English (603-104)
T.T. - Tutor Training
F.W. - Fieldwork with high school students
F.W.P. - Fieldwork with peers.

RESEARCH DESIGN

ROSEMONT

<u>GROUP</u>	<u>VARIABLES INCLUDED</u>	<u>n</u>	<u>Class</u>
9a	Psych, T.T., F.W.	5	2
9b	Psych, T.T.	3	2
10a	Psych, Fr., T.T., F.W.	5	1
10b	Psych, Fr., T.T.	7	1
11a	Fr., T.T., F.W.	3	3
11b	Fr., T.T.	24	3

KEY Class - groups 9a and 9b were in one class. Some students in each class did fieldwork. These students appear separately as group 9a, 10a and 11a.

n = number in group

Psych - Psychology (350-901)

Fr. - French (

F.W. - Fieldwork

TESTING:

At the college level entering students were tested with the Diagnostic Reading Test at:

John Abbott	896 students
Champlain	813 students
Rosemont	598 students

At the high school level students were tested with the Gates-MacGinitie Reading Test at:

Macdonald High School	200	Grade 8
Beaconsfield High School	150	Grade 7
Pierrefonds High School	500	Grade 8
Centennial High School	600	Grade 7, 9
Le Moyne d'Iberville High School	150	Grade 7
MacDonald-Cartier High School	200	Grade 7
de Roberval High School	100	Grade 7, 8

PILOT STUDIES:

Pilot studies to test out materials and procedures and to provide training for new faculty were carried out at John Abbott and Macdonald High School and at Champlain and Centennial High School. The results of these programs were reported in detail in the Interim Report for Phase Two submitted in February 1977.

The results will be repeated here for the interest of the reader.

RESULTS OF THE PILOT PROGRAMS IN ENGLISH

At John Abbott College 34 students were enrolled in psychology (350-901), and English (603-104) and participated in the testing of the final phase of the pilot program. At Champlain 19 students were enrolled. Champlain students tutored students at Centennial High School - Grade 9, and John Abbott students tutored Macdonald High School - grade 8. Table 1 shows the college student's results. It is interesting to note that there were no dropouts either at John Abbott or Champlain. This is an unusual phenomena in any course; it is particularly unusual in a group of "high risk" students.

This same phenomena was observed during Phase One when the program was seriously affected by teacher disruptions both at the high school and college level.

"Of the 211 students in the research program in both colleges, 57 students or 27.0% dropped out. However, of the 57 dropouts, 42 students or 73.6% of them came from groups where no tutoring occurred, compared to 15 students or 26.3% from tutoring groups. In other words, among "high risk" students, there were three times as many dropouts from groups of students who did not tutor. Once the tutoring began 88 of the 92 students (95.6%) completed the work they undertook. It seems that the high school lab situation is an effective means of keeping "high risk" students in school, and working at their academic tasks." (Final report, Phase One, June 1976, p. 17).

Table 1.

MEAN SCORES IN THE DIAGNOSTIC READING TEST PRE - POST SCORES JOHN ABBOTT COLLEGE/CHAMPLAIN COLLEGE PILOT 76 - PHASE 2

Cegep	n	Speed w.p.m.			Vocabulary			Rate of Comprehension			Reading Efficiency		
		pre	post	% of gain	pre	post	% of gain	pre	post	% of gain	pre	post	% of gain
John Abbott	34	260	491	89%	32	44	37.5%	198	264	33.3%	597	1307	118.9%
Champlain	15 4	221 254	296 325	34% 28%	24 29	35 41	46% 43%	148 186	150 192	.01% 3%	459 617	619 811	35% 31%

SUMMARY

The plans for phase two of the program have been executed. Materials in English have been revised. New materials have been written, and the program content and curriculum has been consolidated. The final phase of the program is underway. The results of the experimental stage will be presented before June 30, 1977. All analysis will be complete; two faculty teams will be trained and experienced. Both teams will be ready to undertake the training of other faculty teams. The program is ready to be integrated into the regular curriculum of both colleges. At Champlain administrative and faculty decisions have already assured that the program will be carried on in 1977-78 without further subventions from Degec. At John Abbott negotiations are still underway to the same end.

At Rosemont, the pilot stage of the program is underway, materials have been selected and translated. Four groups of Cegep students are enrolled in the program. Fifteen students will act as tutors at école secondaire de Roberval. Administration and faculty at Rosemont support the continuation of the project with continued subvention from Degec. A proposal for the continuation of the subvention for the French program (phase 3) will be forwarded before March 1.

This semester was the first time the program was run without disruption. The results of the college students presented in Table 1, on a standardized test were impressive, however, this is only part of the results. It should be noted that there were no dropouts at either college by program students. This is an unusual result in a group of high risk students. Higher levels of confidence, new academic efficiency, improved grades, more positive outlook to further academic programs are also important benefits of this program.

SUMMARY OF MATERIAL PREPARATION

MATERIALS

The following books were revised, written, and translated for the second phase:

<u>BOOK</u>	<u>OPERATION</u>	<u>AUTHOR</u>
Handbook for Tutors	revised	Schwartz
Student's Log	revised	Schwartz
Intermediate Program	revised	Schwartz
Instructions for the User	written	Schwartz
Reading Efficiency	written	Woodruff
College Students' Log	written	Woodruff
Manual for Testing	written	Stirling
Guide for High School	written	Clifford
Manuel de lecture	written	Belzile
Exercices de Vocabulaire	written	Belzile
Les Trucs de métier	translated	Belzile
Journal de Bords (Cegep)	translated	Belzile
Journal de Bords (pupille)	translated	Michaud
Manuel du Tuteur	translated	Michaud
Psychologie du Comportement	translated	Michaud

DESCRIPTION OF THE PROGRAM AT EACH COLLEGE

JOHN ABBOTT COLLEGE - This section was written by Geraldine Schwartz.

In July 1976, all John Abbott students received a letter regarding Phase Two of the program, as well as notification of the testing program (Appendix D). By August, 250 returning students returned their applications to participate in the first semester program which was to be carried on as a pilot study. Thirty-five students were selected at random and 34 registered for and completed 2 credit courses in English and Psychology as well as the tutoring training and fieldwork program.

In September, 200 grade 8 students were tested at Macdonald High School with the Gates MacGinitie Reading Test. Thirty-four were selected to participate in the program. In October, 34 John Abbott students and 34 Macdonald High School students were matched and the teams began the 10 week program which concluded December 15th, 1976. The results of this program were presented in the previous section of this report.

In November, results on the Diagnostic Reading Test were sent to 896 entering students. Five hundred and forty students whose reading scores were below the 50th percentile for grade 12 on the Diagnostic Reading Test, were sent a letter suggesting they apply for the program. Approximately 180 students applied for the January program. The applicants were grouped by college program, and a

percentage of each group was selected at random for four groups:

Group 1 - students were asked to register for the Psychology and the English course.

Group 2 - students were asked to register for the Psychology course.

Group 3 - students were asked to register for the Psychology course.

Group 4 - students were asked to meet at a specified time for a non-credit lecture series on reading efficiency. They were told that attendance in this program would ensure their places in next year's program.

In November, 150 grade 7 students at Beaconsfield High School and 500 grade 8 students at Pierrefonds High School were tested with the Gates MacGinitie Reading Test. In December, high school test results were returned and approximately 25 students at each school were chosen to participate in the program.

In January, students registered for the programs with special forms permitting entry to the program. Since some students registered in the latter part of the registration when course selection was limited, they were not always able to fit the program courses into their schedule. This procedure resulted in reduced numbers for the course which was most unfortunate since at least 2 students had applied for every place available. If this program is included in the regular

curriculum of the college, pre-registration procedures will need to be implemented so that students are able to build their schedules around the program and still take their required courses.

By January 23, the program was under way. In February matching meetings took place at Beaconsfield and Pierrefonds and the 10 week tutoring program began. In May, all participating students were given the post test. The results are presented in the following section.

CONCLUSIONS

The program and its procedures ran smoothly during both semesters. Except for January registration, all problems encountered were minor and were quickly solved. The program engendered good will at the high school and college level. Student participants were especially enthusiastic and their evaluation will be presented in the next section.

The program at John Abbott is now ready to be integrated into the regular curriculum. It's inclusion is strongly supported by the college administration. Whether this will indeed occur will depend on budgetary and staffing restraints. However the faculty is trained, the materials, and procedures are available, and the high schools are ready to participate.

CHAMPLAIN REGIONAL COLLEGE

'The programme to develop reading efficiency and academic effectiveness in high-risk college students at Champlain Regional College.'

Fall and Winter semesters 1976-1977.

Researchers

Susan Kerwin
Susan Woodruff

The second year of the project at Champlain Regional College has demonstrated the effectiveness of the programme at both the college and the high school levels. During the fall semester, one section of both the English and Psychology course was offered; during the winter semester two sections of English and Psychology, and one section of English alone were offered. A total of 92 students participated in the project throughout the year. During both semesters college students were involved in tutoring at the high school level; in addition one group was involved in peer tutoring during the winter semester. The two participating high schools from last year, Lemoyne d'Iberville and Centerinial, agreed to become involved again in this year's research. In addition, a third South Shore polyvalente, Macdonald-Cartier Memorial High School, expressed interest in the project and became formally involved during the winter semester.

During both semesters, results of reading scores at the high school level showed significant improvement as a result of the tutoring, while college students' reading scores also significantly improved. This year's research also included an assessment of several other indices, such as students' attitude to reading, attitude to studying....- all showing significant improvement as a result of participation in the project.

The administration, Academic Council, and department heads of the college have not only endorsed the project but also consider reading improvement to be a college priority.

Thus, the project is to continue as a regular part of the curriculum of Champlain Regional College from September 1, 1977.

Pre-Programme Organization

Planning for year II of the reading project began upon notification by DGEC that there would be funds available to organize the programme. Thus in July 1976 much of the essential organization was established. This included meetings with the high school section heads as well as the internal planning and writing which was conducted at Champlain.

High Schools

Summer meetings were held between Mrs. Barbara Curtis, of Centennial High School and Champlain researchers, and with Dr. Ted Gould of Lemoyne.

At the Centennial meeting, a basic plan was evolved for both the fall and winter sessions in which tutors from Champlain would tutor high school students in reading. Testing dates for both the grade 9 and grade 7 students were established for the third week of September. It was agreed that classroom teachers could administer the tests to all students. Matching meetings for grade 9 students were set for the week of October 4; those for the grade 7 students were scheduled for February 2, 1977. Mrs. Curtis also agreed that the school would replenish any books missing from the high school bibliography.

In a meeting at Lemoyne d'Iberville High School, Dr. Gould expressed concern over the negative results of the project in Phase I at that school. For that very reason it was agreed that a second year was necessary to establish whether the programme could work in a school so terribly overcrowded. A new section head, Mrs. Heather Mizener, was appointed. Details about testing, book ordering, matching meetings were worked out in early September, as the tutoring would only continue at Lemoyne in the winter semester. Thus the Champlain researchers conducted the testing of grade 7 students in early January 1977, and the matching meeting at Lemoyne took place in the second week in February. Because of the space restrictions, a limit of 14 tutors was set at Lemoyne, and these tutors were requested to appear during the Lemoyne lunch break.

In October 1976, the Champlain research team was approached by teachers from Macdonald-Cartier Memorial High School, a South Shore polyvalente. Because they had heard of the success of the programme, some of the faculty were interested in a presentation about the project. After this initial meeting, the vice principals, Mrs. Ayres and Mrs. Lambert, and a staff member, Mrs. Ramsay, asked that Macdonald-Cartier become a participant for the winter semester. Testing of the grade seven students took place in early January 1977. The matching meeting occurred in early February, and the tutoring sessions began on time at Macdonald-Cartier with 21 tutors working there.

Champlain College

Several aspects of the programme at Champlain College, itself, had to be organized throughout the summer months. Books had to be ordered, courses and schedules planned, materials written and students informed of the project in order to pre-register for it.

Another major aspect of the programme was to organize for and test all incoming students. Consequently a pre-registration session for testing in reading was organized by the Champlain researchers, in order to assess the reading ability of incoming students. They were sent a letter outlining the intent of the testing, and were requested to appear for the Diagnostic Reading Test on either August 17 or August 24, 1976. A total of 810 students were tested at that time. The results of that testing can be seen in Figures A, B, C, D and E. (pp. 76-80).

Figures A and B indicate the percentage of students scoring below the 501th percentile on the Diagnostic Reading Test at grade levels 8 through college freshmen. Normally it would be expected that fifty percent of the students would score below the 501th percentile at either the grade 12 or college freshman level. However, Figures A and B show that, in fact, 86% of the students at Champlain Regional College fall below this percentile at the college freshman level, and 73% of the students score below this percentile at the grade 12 level. Since there were 810 students in the sample, it can be seen from the data that 694 students were assessed as reading below the college freshman level, and 587 fell below grade 12 standards. (Figure B)

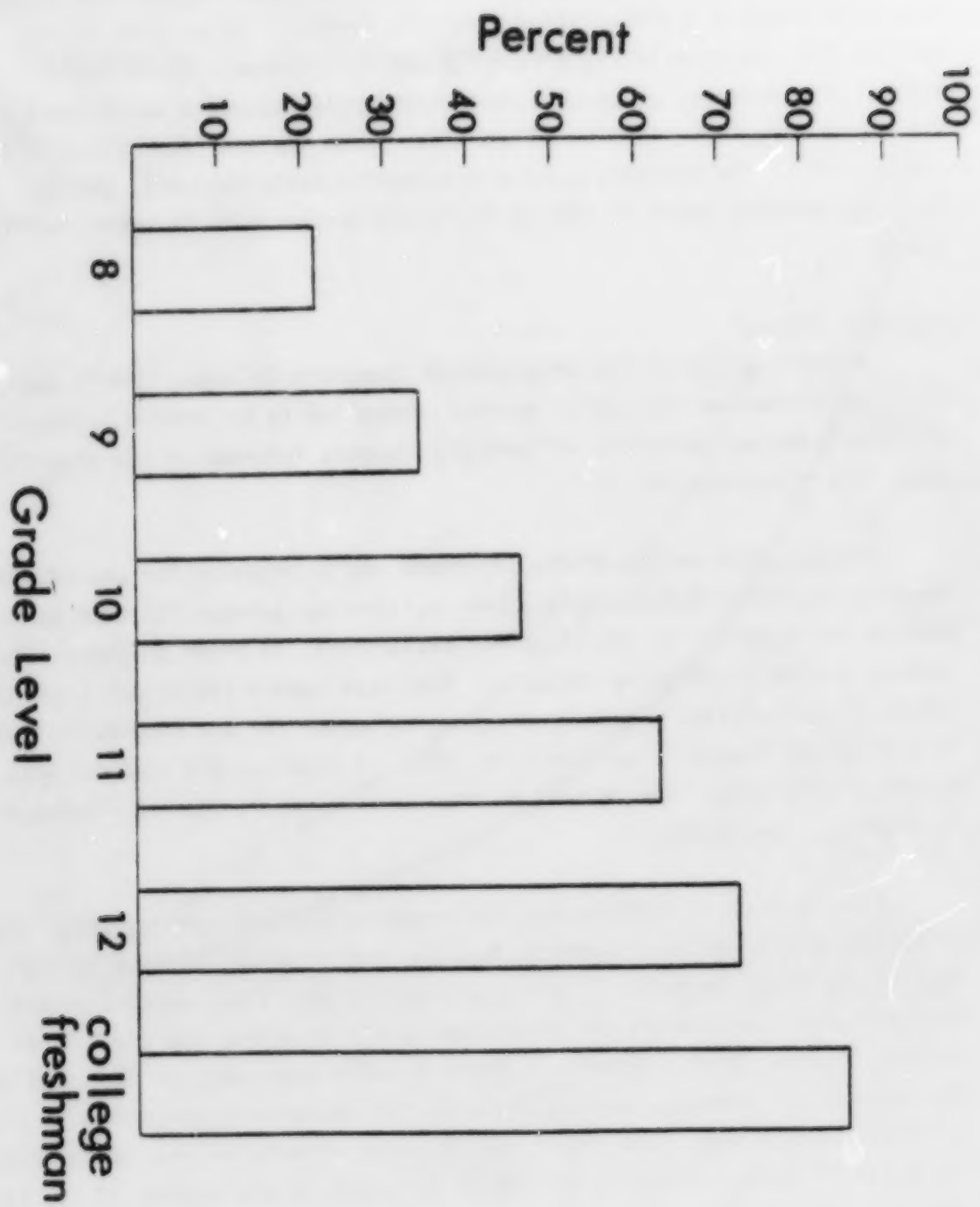
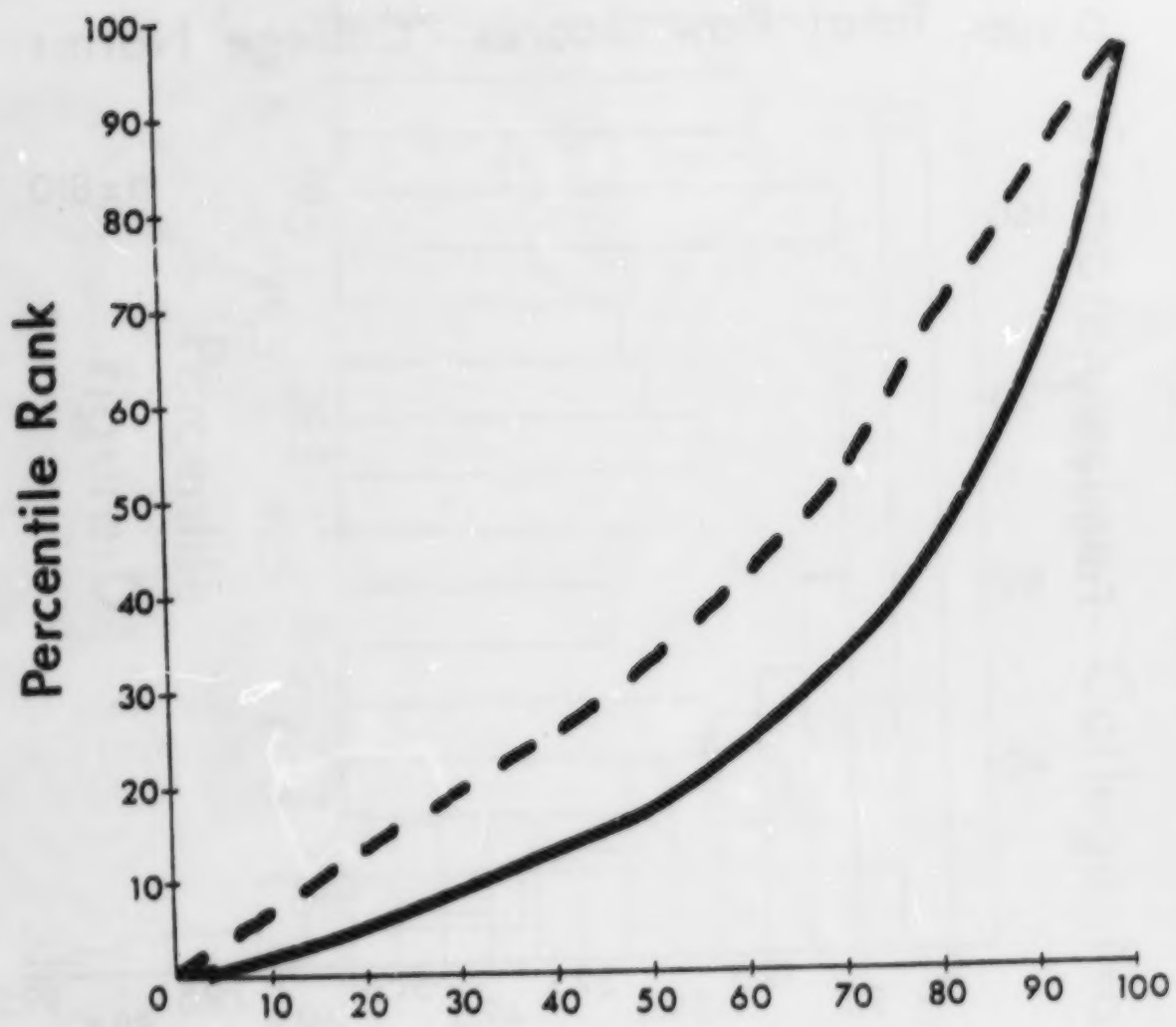
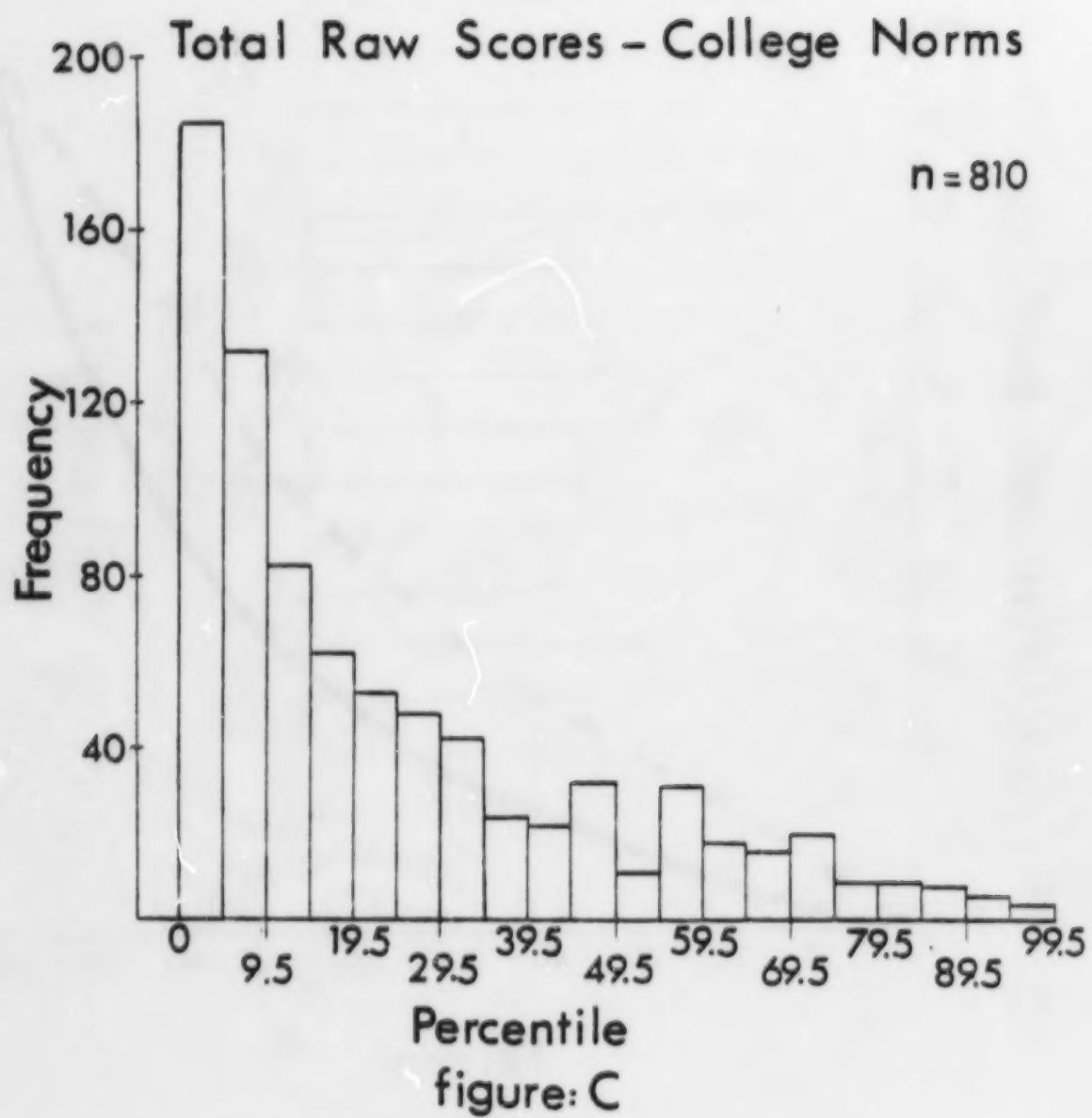


figure:A

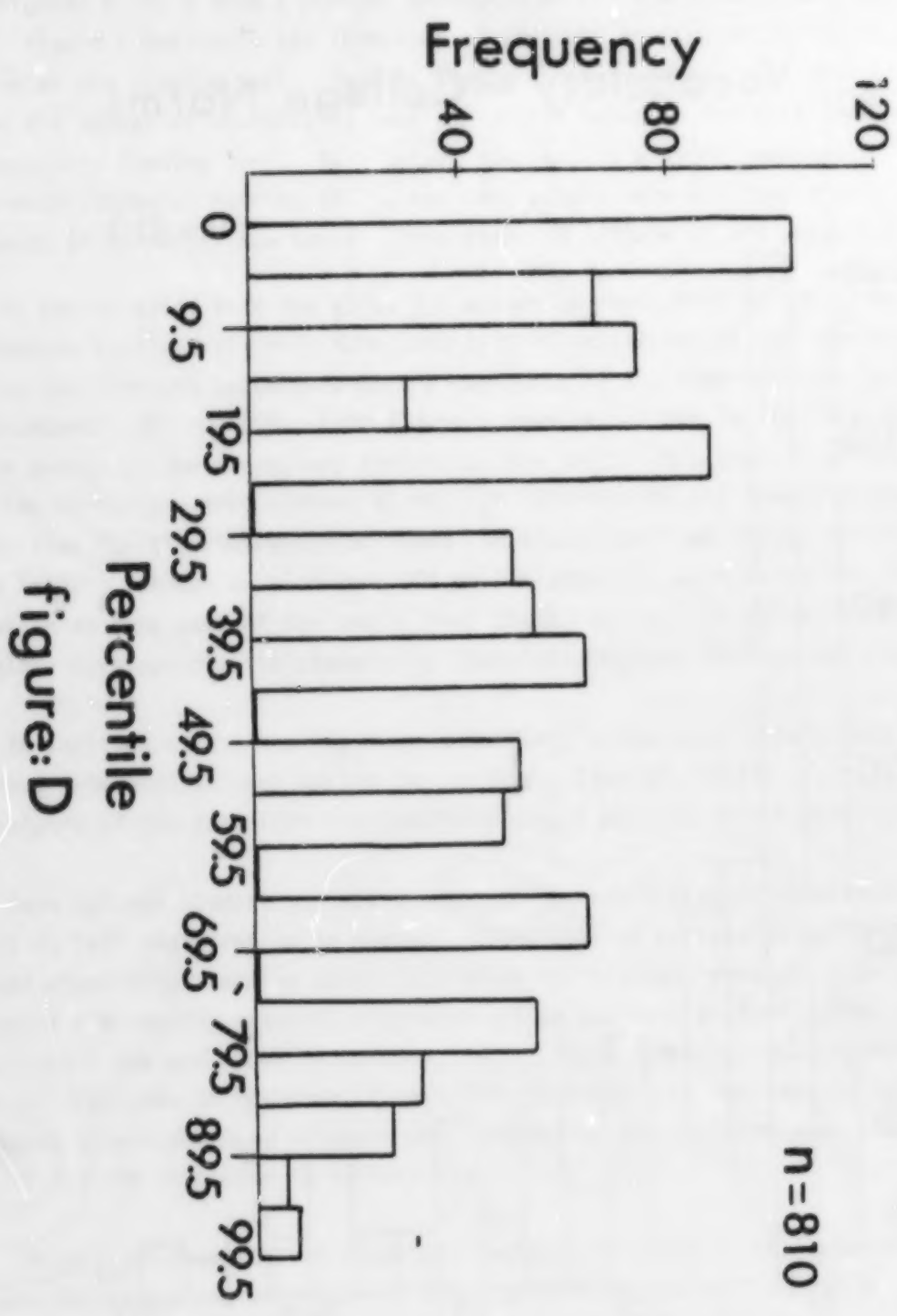
college freshman norms —
grade 12 norms - - -

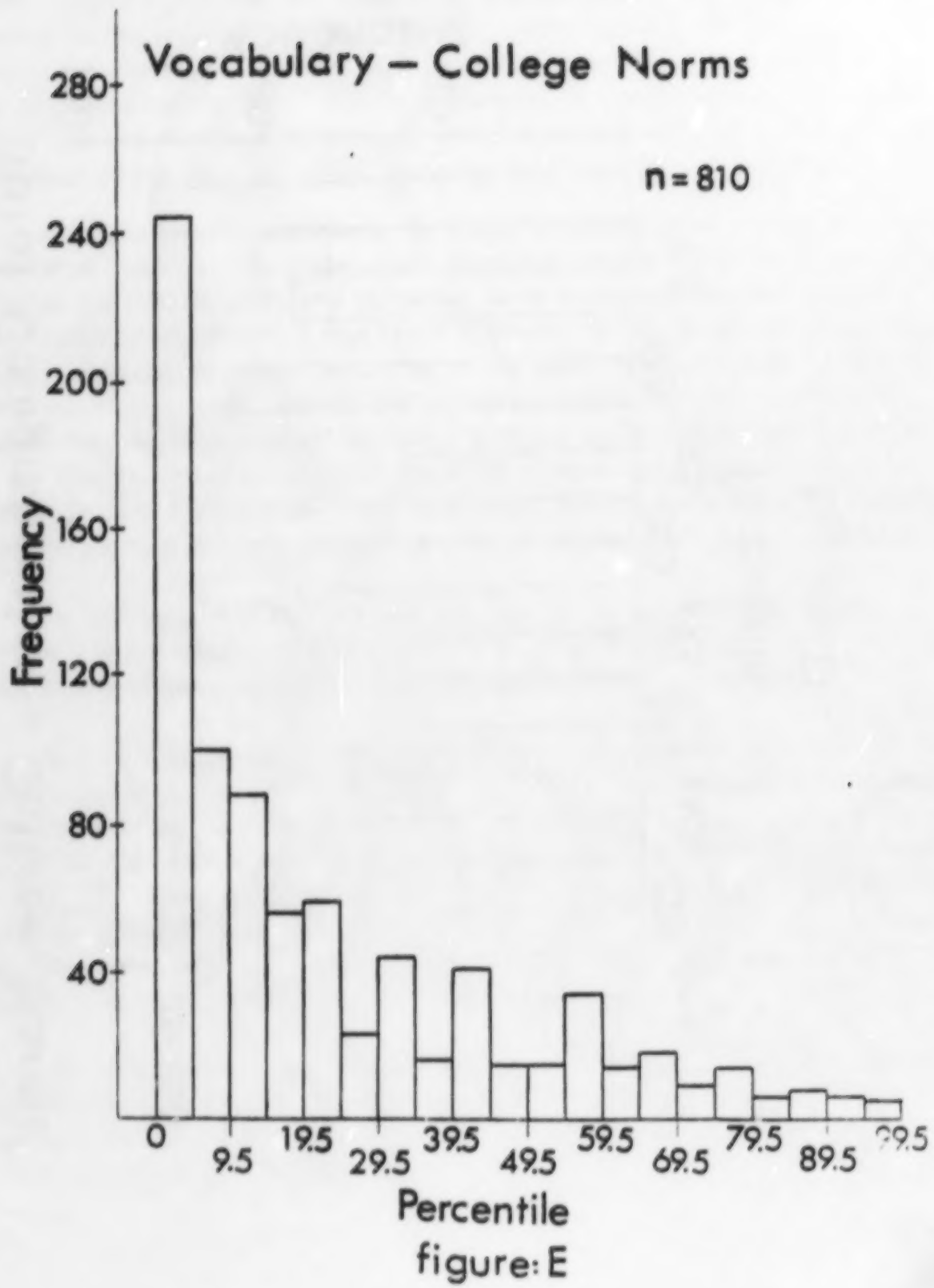


Percent
figure: B



Total Comprehension – College Norms





Figures C, D, E show a further breakdown of the scores according to college norms. Figure C indicates the frequency of students scoring at the various percentiles on the reading test. This is simply another method, non-cumulative, of showing the number of students in each percentile based on the total raw score on the Diagnostic Reading Test. This total, however, is a global measure. To further assess each students' reading skill, the test scores were analyzed according to the components of the total raw score: comprehension (Figure D) and vocabulary (Figure E).

As can be seen, from the data, the scores on comprehension are almost normally distributed; that is, slightly more than sixty-five percent of the students score at or below the fiftieth percentile on the two parts of the comprehension sections of the test (numbers 1-20; 80-100). From Figure E however, it can be seen that many students perform poorly on the vocabulary section of the test. This portion of the test is comprised of sixty items, numbers 21-80. In this section the time allotment is shorter than for the comprehension items. Although the time factor may have a bearing on the results, it can be seen that 85% or 686 students score below the fiftieth percentile on this part of the test. From these results, the necessity of stressing vocabulary development with students at Champlain Regional College was clearly evident.

In addition to the Reading Diagnostic Test, birth order information was collected from each student during the testing. (See pp. 31-33). The analysis of the data from the Champlain sample appears in the overview.

Each college student who was tested was presented personally with his test results at fall registration in August. Along with an explanation of test scores, students whose total reading score fell below the fiftieth percentile were handed an outline of the reading research programme and an application form. They were urged to enroll for the programme in January, 1977. These same students received a reminder about the programme in November, 1976. (See Appendix CA) Teachers in the English Department also encouraged students who were having difficulties with reading to register for the programme in January, 1977.

The project personnel at Champlain Regional College, as of September 1, 1976, included two full-time instructors: Susan Kerwin, Psychology, and Susan Woodruff, English. Thus, it became possible to offer a full complement of project courses to the students during both semesters.

The College Programme

Table C₁, below, presents an overview of the two semesters at Champlain Regional College for 1976-1977. Included is a breakdown of the number of students each semester, the number of drop-outs, the courses they took, the type of tutoring experience they were involved in, the number of tutoring assignments they completed to 10 hours, as well as the average number of hours that each student tutored. A more extensive description of the course follows.

TABLE C₁

Semester	Total No. of Students	No. of Drop-Outs	Courses Taken & No. of Hrs. Per Week	Type of Tutoring	No. of Tutoring Assignments Completed to 10 hours	Average No. of Hours Completed
Fall	22 (1 group)	2	English (3) Psychology (3)	High Sch. Grade 9	6/20	7.5
Winter	25	1	English (3) Psychology (3)	High Sch. Grade 7	20/25	9.8
	29	1	English (3)	High Sch.	25/29	9.6
	21	0	English (2) Psychology (3)	Peer (College)	20/21	9.3

Fall Semester

During the fall semester, a group of 20 students was enrolled in the joint English-Psychology programme. Because of registration difficulties, only half of the number actually volunteered for the project. The others, who had been directed into the programme, were not as diligent in fulfilling their tutoring assignments. This is evident from the data which appears in Table C₁, in which it can be seen that only 6/20 students managed to complete the minimum of 10 hours of tutoring. The reading programme was offered as a credit English course. It followed the outline set up in the reading efficiency booklet prepared for the course by Susan Woodruff in the summer of 1976. The three sections are: Speed & Accuracy, Vocabulary Development and Study Skills Improvement.

Although most of the 45 hours of course time was devoted to exercises designed to improve ability in those areas, much of the first four weeks (approximately 12 hours) was set aside to prepare students for teaching reading to high school students. Pertinent techniques for both college and high school students were presented during this section of the course along with materials which could be of benefit in the tutoring sessions at the high schools, following the general outline of Tricks of the Trade by Geraldine Schwartz. Class discussions of the tutoring experience also occurred at each session. This was especially important in this term because of the disruptions in the South Shore School systems and the varied nature of the class itself.

The Psychology course began with nine hours of training in "contingency management." This section outlined how the principles of behavior modification - particularly reinforcement and extinction procedures - could be used by our students in tutoring at the high school level. The remaining thirty-six hours of the course focused upon the application of these principles of behavior modification to a self-modification project. Specifically, students were required to implement a self-change programme to improve their study habits. Using the study skills as outlined in the English course, students were required (1) to define the target behavior (i.e., exactly what they meant by "good study behavior"), (2) to collect baseline rates of present study time for a 2-week period, (3) to outline a menu of personal rewards to work for, in order to increase motivation, (4) to write up a formal contract to improve study behavior, and (5) to implement this contract for a period of six weeks. The basic steps of a behavior modification project were thus clearly outlined to the students. By the end of the course they were very familiar with both the theory and practical application of behavior modification. Class time was devoted to the discussion and group problem-solving of any behavioral problems that arose during the tutoring sessions in the high schools.

Winter Semester

The first semester had been seen as a pilot study for the actual experimental phase of the research which began in the winter semester. At Champlain College, 115 applications for the courses in January 1977 were received. As shown in Table C₁, twenty-five students were enrolled in a high school tutoring programme, including both English and Psychology, twenty students were registered in a peer-tutoring programme and twenty-nine students tutored high school students, but took only the English course. The forty-one students who were not chosen in January 1977 elected to register for the programme in September 1977, as long as it was still functioning.

The content of the English course remained essentially the same as that for the Fall Semester for all three groups. Some restrictions, however, altered the amount of class time allotted to the practical application of techniques. Group one received the greatest amount of classtime, and thus exercises for the improvement of both speed and accuracy and vocabulary development were applied equally. In Group two, students were paired up and tutored one another. Consequently, one hour of English classtime was devoted to the tutoring experience. The requirements for the course assignments were identical to those for Group one, however, and it was expected that the students do some of the work on their own, possibly within the tutoring itself. In Group three, nine hours of the 45 were given over for the contingency management section of tutor training. Although this Group had the same amount of English classtime as Group two, much more time here was devoted to a discussion of the tutoring experience which in Groups one and two were divided between English and Psychology. This cut into planned applications of reading techniques.

In addition to pre and post test reading scores, measures of pre and post treatment attitude to reading, according to the Estes Attitude to Reading Scale will be discussed in the results section. This scale consists of 20 questions to which students respond on a five point scale ranging from agree strongly to disagree strongly. (See Appendix C_B)

Contents of the Psychology course remained fairly similar to that of the Fall Semester as described above. More of an emphasis, however, was placed upon the role that cognitions or thoughts play in terms of directly influencing behavior. In working on their study projects, students were encouraged to listen to themselves "with a third ear", in order to become aware of and to record any negative thoughts voiced while studying. This exercise proved to be particularly revealing - providing many students with much insight as to the origin of their negative attitudes and avoidance strategies towards studying. They were taught to replace these negative thoughts with more positive, encouraging self-statements. These positive self-instructions served to reinforce their improving study behavior. This system of behavior modification through cognitive techniques worked particularly well for a number of students who had experienced difficulty in controlling their study behavior through a system of tangible, physical rewards, as used in traditional behavior modification.

Pre and post measures of the Survey of Study Habits and Attitudes were administered to all students enrolled in the project. This 100-point questionnaire measures the student's strengths and/or weaknesses on seven scales related to academic effectiveness. (See Appendix C_c). In addition students from Groups one and two filled out Rotter's Internal-External Scale during week 12. This is designed to measure whether the subject is primarily internally or externally controlled (See Appendix C_d). This data is presented in the results section.

Tutoring

High School

Fall Semester

Although the schedule for the Fall Semester at Centennial proceeded according to plan during September, the teacher strike during October disrupted the smooth flow of the programme. The school, itself, could neither designate the grade 9 students nor contact the parents. This was left to the researchers to do. Much of the explanation of the intent of the project was misinterpreted by the parents and thus some potential candidates were not permitted to participate. In the end, however, a joint meeting of tutors, tutees and tutees' parents, when available, was held at Champlain College, a week later than originally planned. The tutoring thus began a week later than scheduled, making it very difficult for some of the tutors to complete the requisite ten hours. Despite

the setbacks, however, the high school students who persevered to the end of the term improved in their reading skills. (See Table 8 p.113).

Winter Semester

The organization for the Winter Semester was completed before the end of December, 1976. Students at Centennial and Lemoyne High Schools had been chosen by early January; those at Macdonald-Cartier High School were tested and chosen by early February. Matching meetings were held at the three high schools in the first and second weeks of February, and the tutoring began in the third week of February. In total there were twenty (20) tutors at Centennial High School, fourteen (14) at Lemoyne High School and twenty-one (21) at Macdonald-Cartier High School. The great majority of tutors at Centennial and Lemoyne completed their ten week session; however three tutors at Macdonald-Cartier did not complete their assignment. While the space limitations at all three high schools could have caused inconveniences to faculty and tutors alike, arrangements were made to accommodate everyone with as little disruption as possible. Difficulties over space and textbook accessibility in Phase I at Lemoyne were overcome this year. The organization and support of the section head, Mrs. Heather Mizener, and of the guidance counsellors, Frankl Weiser and Bill Colotello, made the experience most rewarding for the tutors at their school. The same can be said for the supervision of Mrs. Barbara Curtis at Centennial and the continuous assistance of her secretary, Mrs. Linda Shepherdson. The flexibility arranged by Mrs. Ayres, Mrs. Lambert and Mrs. Ramsay helped alleviate many of the problems caused by transportation delays in attempting to reach Macdonald-Cartier High School, which involved a journey of one hour from Champlain. However, this greater distance did lead to problems for the tutors in completing the necessary ten-hour sessions.

The response has been positively in favour of continuing the programme for the fall winter-semesters 1977-1978, at Centennial and Lemoyne. There has, as yet, been no meeting with the participants at Macdonald-Cartier High School although they seem pleased with the overall results. The high schools, however, have all agreed to foot the expenses incurred by the testing of their own students.

Peer Tutoring

During the winter semester, one of the groups enrolled in the joint English-Psychology programme became involved in peer tutoring instead of the regular tutoring at the high school level. At the beginning of the semester, each student was asked to identify the subject he would like to tutor in and the one he would like to be tutored in. Pairs of "tutor-tutee" were then formed with the majority of students working in English, to improve vocabulary and reading skills, some of them worked in Psychology; one group worked in Sociology, and two groups in Chemistry. Each student was required to tutor a peer for one hour per week and would also receive tutoring for an additional hour each week throughout a period of 10 weeks. Accordingly, one hour of the English course was set aside for peer tutoring each week during which time the groups were visited and supervised by both instructors. Students were required to make arrangements to meet each other for the additional hour to fulfill their weekly contract. Forms were prepared for all students - with each tutor being required to write up a weekly plan for the tutoring session and a short report on it. Each tutee was required to sign a weekly contract, specifying what work he/she would be doing between tutoring sessions. (See Appendix C_E).

In order to assess the effectiveness of the tutoring experience both high school and peer tutors were asked to fill out a questionnaire. In addition, an interview conducted with the peer tutors provided more information. (See Appendix C_F).

Results and Discussion

Overview

The fall semester was designed as a pilot study in order to identify and deal with any potential difficulties in the programme. No accurate analysis of the results of this semester can be made because the design was confounded by the disruption in the high school, and the nature of the students who were enrolled. Hence a more accurate analysis of the effectiveness of the programme should only be based on the results of the winter semester. The areas to be presented and discussed are: 1) the questionnaire on tutoring and the interview with the peer tutors; 2) the results of the study project in Psychology; 3) the Survey of Study Habits and Attitudes; 4) Rotter's Locus of Control Scale; 5) the Estes' Attitude to Reading Scale; and 6) the number of books read by the college students.

The reading results appear in Table 10b for the college students. Those for the high school students appear in Table 8. Any further data on the high school students appear in Tables 8 and 9 and will include the number of points earned, the average number of sessions and the number of books read.

Tutor Questionnaire

The tutor questionnaire is divided into two parts. The first section deals with tutor training; the second section is concerned with the tutor experience in general, with a sub-section for peer tutors (questions 41 and 42) and one for high school tutors (numbers 43-50). The intent of the questionnaire was to judge the tutor response to the experience in as much detail as possible. The questionnaire and the responses to it are to be found in Appendix C_G.

Section one, on tutor training, indicates that, in general, the students felt adequately prepared for the tutoring. The further breakdown of the results, however, shows that the high school tutors, in group 3, felt that the training in English was not long enough. This was to be expected as in this group of English only, the first nine hours dealt with contingency management and they had limited time for English training before they actually began tutoring. This is consistent with responses in other groups, too, however, as it appears that relatively greater stress should be given to English training over that in Psychology. It would appear that students feel the need for more concrete English skills as compared with the more theoretical approach used in Psychology.

It is obvious from the responses that the goals for the peer tutors were quite different from those for the high school tutors.

The high school tutors responded unanimously that the experience was rewarding. Eighty percent of the peer tutors felt that it was so for them. Interestingly, 100% of the peer tutors felt that they had a comfortable working relationship with their tutee and were completely satisfied with the progress made by him. The high school tutors were less comfortable and not as satisfied with the progress made by their tutees. They also did not feel that they could motivate their tutee as well. This seems to indicate that there is more stress involved in the high school tutoring, and that the goals set are more stringent in this setting. Obviously, too, the lessons are more structured in general, and in terms of materials. Thus, only half of the high school tutors felt that they had reached their goal whereas the majority of peer tutors felt that they had done so.

Over ninety percent of the tutors positively indicated that they had learned from the tutoring experience. This is consistent with the postulate that to teach is to learn.

The tutors responded that they felt there was a need for a structure for the lessons but that there was too much detailed paperwork involved. Accordingly, course materials are under revision this summer.

The general response is overwhelming positive. The peer tutors and the high school tutors benefitted equally from their roles. This indicates the validity of both types of experiences. Hence, both are going to be available to all tutors in the programme in future. All students will tutor at the high school level, as well as peer tutor in the context of the two courses. Overall, the students stated that they would repeat both courses, they would still do the tutoring and they would recommend the experience to their friends.

Peer Tutor Interview

The results of the peer-tutoring interview, which was held on the last day of classes emphasized again that everyone felt that it had been a positive experience. Each pair (of tutor/tutee) was interviewed separately, using the criteria found in Appendix C_f. Each session lasted approximately twenty minutes.

It was obvious that most, tutor and tutee, alike, felt that they had improved their skills in the area they were working on. The exception was a group of four students who worked in chemistry. They were all in the same class and thus could not really aid one another as much as they had expected. They also neglected to structure their sessions beforehand, leading to much confusion.

Another problem which was isolated was the difficulty which arose when friends tutored one another. This factor will be controlled for in the future.

Although the amount of time involved was quite extensive, with an average of two and a half hours per student per week allotted, each student felt they had learned from the experience. They also wholeheartedly endorsed the idea of using peer tutoring in the specific subject areas, English and Psychology.

Psychology Study Project

The results of the study project indicate that the majority of students increased their study time from extremely low weekly baseline rates of less than twenty minutes to a minimum of eight to ten hours per week. In addition, as noted in their weekly progress responses, they became increasingly more conscious of applying study skills such as skimming, scanning and note-taking techniques, as practised in the English course. Most students reported that the control of their own study behaviour through behaviour modification had been quite difficult to do, and a certain amount of cheating (obtaining the reinforcer before completing the required amount of study time) was inevitable. The majority, however, reported a satisfaction with these self-modification techniques, particularly in relation to the cognitive components.

Survey of Study Habits and Attitudes

The pre and post test data, including mean scores, percentile ranks and the significance levels, according to the analysis of variance, for groups 1, 2, and 3, on the Survey of Study Habits and Attitudes is presented below in Table C₃. This includes the data for all seven scales of the survey. They are: Scale 1, Delay Avoidance (DA); Scale 2, Work Methods (WM); Scale 3, Study Habits (SH); Scale 4, Teacher Approval (TA); Scale 5, Education Acceptance (EA); Scale 6, Study Attitudes, (SA); and Scale 7, Study Orientation (SO).

Table C₃

The mean group results for responses to the Survey of Study Habits and Attitudes

Scale	Test	Cell Mean	%ile rank College norms	Level of significance
Scale I	pre	16.07	20	0.01
(DA)	post	25.54	55	0.01
Scale II	pre	19.87	30	0.01
(WM)	post	30.27	70	0.01
Scale III	pre	33.95	25	0.01
(SH)	post	55.84	60	0.01
Scale IV	pre	26.30	20	0.01 *
(TA)	post	34.53	60	0.01
Scale V	pre	23.22	15	0.01
(EA)	post	30.98	45	0.01
Scale VI	pre	49.53	20	0.01
(SA)	post	65.37	50	0.01
Scale VII	pre	85.30	20	0.01
(SO)	post	121.77	60	0.01

*implies a significant difference between as well as across groups.

This data indicates that students in all of the groups made significant improvements in pre vs. post test scores on all of the seven scales (See Appendix C_C for a description of these scales). Scale seven, which represents a cumulative score and provides an overall measure of study habits and attitudes is significantly different in pre against post measures, at the p 0.01 level. It is interesting to note that in scale IV which measures teacher approval, or the students' opinions of teachers and their classroom behaviour and methods, group 1 scores significantly higher than group 3 (at the p < 0.05 level). This difference can obviously be

attributed to several variables, among them possibly being the smaller class size, and thus the greater opportunity for interaction between teachers and students.

Although no pre test of Rotter's Locus of Control Scale was administered to the students at the beginning of term, a measure was taken during week 12, at which time both the study projects and the tutoring sessions were well under way. The negative correlation between the results of the Survey of Study Habits and Attitudes and the Locus of Control Scale is to be expected, as greater improvement in study habits should be correlated with a lower score on the Rotter Scale. This would indicate a greater degree of internal control. The data proves to be most interesting, and a more extensive analysis of scores, both between and within groups, on the Diagnostic Reading Test, the Survey of Study Habits and Attitudes, Rotter's Locus of Control Scale and the Estes Attitude to Reading Scale is currently underway.

Estes Attitude to Reading Scale

It has been the aim of the research team to not only improve the actual skills level of the students at both high school and college, but also to encourage the students to become enthusiastic, independent readers who regard reading as a priority leisure activity. The measure used to assess whether, in fact, any change did occur was the Estes Attitude to Reading Scale devised in 1971 by T.H. Estes. The scale consists of 20 questions, with responses ranging from negative to positive on a five point scale. An analysis of the responses of the entire group of students in the project was conducted to see if there was any real significant difference in the recorded responses, pre and post tutoring. An example of the actual scale, with the table of mean responses per question per group, appears in Appendix C_B.

As can be seen, for fifteen of the twenty questions, the within group difference is significant post over pre, thus leading the researchers to suspect that the attitude to the students does in fact improve as a result of tutoring in reading. For those questions for which there is no significant difference it can be seen that the mean response was fairly high to begin. There are five questions for which there are also significant between group differences. While no real cause for these differences can be pinpointed, it can be supposed that a difference in treatment between groups could be the cause. For that reason a table showing the mean number of books read by each group has been included as a possible contributory cause. As can be seen from Table C₄ those who tutored in high school read more books than they had contracted for. It may mean that the change in attitude in groups 1 and 3 derives from the greater number of books read while parallel reading with the tutee.

Table C₄

A mean score comparison of the number of books read versus the number contracted for, by group.

# of students	Group	No. of books contracted for	No. of books reportedly read
24	1	6.56	7.34
20	2	6.00	6.25
28	3	6.92	9.96

As can be seen from the above table, the students who tutored in the high schools read more than the peer tutors. Those enrolled in the Psychology and English courses, however, who also tutored in the high school (group 1), showed significantly improved attitudes to reading, in those questions for which there was a between group difference (see Appendix C_B, Table C_{B.1}).

Future Plans

The response of the tutors to the tutoring experience and the support of all those involved with the project have ensured its continuation for 1977-1978. In February 1977, the Champlain researchers presented an outline of the project to the Campus Academic Council. The members of the Council endorsed the proposal for its implementation into the regular curriculum for 1977-1978. A meeting of department heads in late February also resulted in the approval of that body for the continuation of the project. Budget money has been set aside for next year to run the programme and for the extension of some of the activities on a more permanent basis. In this latter category fall the establishment of a college learning centre to be staffed by volunteer tutors from previous semesters. These tutors will guide any other college students in areas such as improving speed, comprehension, vocabulary development; and general approaches to studying. This centre will also be used in conjunction with other departments in the college in aiding the student to learn how to learn more effectively in any discipline, and thus will serve as a college-wide resource centre. It will also be used as a depot for the high school tutors in terms of storage of resource materials.

The Champlain researchers will be establishing the centre during the summer of 1977. Many of the materials for it will be written by them at this time. In order to gain as much insight as possible into the various aspects involved in such a venture, they will attend two courses during June 1977. The first, a course in the 'Personalized System of Instruction' (the Keller plan), offered by Georgetown University, will aid in the preparation of individualized self-help learning packages. The second is a workshop offered by the University of California at Berkeley and will deal with the establishment of the college learning centre.

During the summer of 1977 the personnel at Champlain will also be using their acquired skills to rewrite some of the materials for the two academic courses, in order to fully adapt them to the particular needs of Champlain College. The provision for the hiring of a full-time summer technician, who has been through the programme, and who will be employed on a part-time basis during the year, has made many of the above mentioned projects feasible.

It is the intent of the research team at Champlain to prepare an explanatory memorandum about the learning centre, and the tutoring centre for the fall of 1977. Included in this summary will be an analysis of the reading results of the entering students, who will be tested in June 1977. An explanation of the project's aims, a breakdown of the reading level of the first year students by programme and an introduction to the concept of textbook readability levels, such as those utilized in the Fry, Fogg or Smog formulae will be appended to this information sheet to be distributed to all faculty.

In addition to the project tutoring programme, and the learning centre for the Champlain students, a community tutoring centre has also been established, using trained tutors who have participated in the project. These tutors who in the past have been given refresher courses at the beginning of the semester, are available on either a volunteer or paid basis to tutor anyone in the community in any academic subject. This too will be co-ordinated through the learning centre next year.

RAPPORT D'ACTIVITES AU CEGEP DE ROSEMONT

écrit par

YVES MICHAUD

RAPPORT D'ACTIVITES AU CEGEP DE ROSEMONT

I. Déroulement des activités

Juin 76 Une rencontre spécifiquement destinée à la formation des 2 membres de l'équipe de Rosemont, Thérèse Belzile et Yves Michaud, a lieu avec Dr Schwartz.

Juillet 76 Une autre rencontre du même genre a lieu. De plus, une planification du programme français a été élaborée en termes de partage des responsabilités et déroulement des opérations.

Août 76 Autre rencontre de formation avec Dr Schwartz sur les diverses dimensions du projet.

Septembre 76 Une première démarche est entreprise par l'équipe de Rosemont auprès de l'Ecole de Roberval afin de planifier la préparation du travail expérimental des tuteurs, et le déroulement des choses concernant le diagnostique et le traitement.

L'adaptation du test diagnostique de lecture est entreprise par Thérèse Belzile. L'adaptation du manuel de technologie du comportement débute avec Yves Michaud.

Un professeur de français, Jean-Charles Castonguay, est approché et s'attaque à la création d'un test de français.

Une autre rencontre de formation a lieu avec Dr Schwartz.

Octobre 76 Les matériaux de diagnostique sont définitivement choisis et préparés: Manuels, normes d'administration, questionnaires, feuilles de réponse, clés de correction, en relation avec l'informatique. Les impressions nécessaires sont réalisées. Les tests ont été Diagnostic Reading Test (DRT), cinq sections du General Aptitude Test Battery (GATB) traduction française et adaptation de l'Institut de Recherches Psychologiques Inc., et le Test de Rendement en français (TRLF).

Une lettre d'introduction au programme et d'invitation à participer au testing est préparée à l'intention des étudiants de français, nouveaux de la session automne 1976.

Novembre 76 Grâce à la collaboration des Services pédagogiques et du département de français et de quelques professeurs comme aides au testing, celui-ci se réalise à l'intérieur des cours de français 601-111, au cours d'une semaine. Malheureusement, la fermeture du collège oblige à remettre le testing du jeudi et vendredi à deux semaines plus tard causant ainsi un préjudice sérieux à l'ensemble de l'opération testing. Au total, 594 étudiants se sont soumis au testing qui portait sur les habiletés en lecture, sur le français et sur la perception mécanique.

Pendant ce temps, un diagnostique est réalisé auprès des étudiants de Secondaire I à l'école Roberval par Mme Nadine Serrouya, Conseillère de l'école.

Une session de formation a lieu avec Dr Schwartz.

Décembre 76 Les données retirées du testing en habiletés de lecture et rendement en français sont introduites dans l'informatique. Des difficultés des machines à lecture OPSCAN retardent les opérations à Rosemont, puis à John Abbott. Finalement, le programme informatique de John Abbott sur les habiletés en lecture est transféré à Rosemont et malgré les corrections ceci permet d'avoir les résultats quelques jours avant Noël.

Des lettres sont alors préparées et envoyées à l'intention de tous ceux qui ont participé au testing. Les 400 parmi les 594 qui se sont avérés faibles en lecture et en français sont invités à s'inscrire au programme de traitement correctif qui aura lieu en session hiver 77. Parmi eux, plus de 150 ont un degré de compréhension inférieur au 25ième percentile.

Finalement, une rencontre de formation a lieu avec Dr Schwartz.

Janvier 77 92 étudiants ont choisi de participer au traitement correctif en lecture. Parmi eux, 8 ont été retenus et inscrits au cours de 350-901 (dont cinq comme tuteurs), 15 ont été retenus et inscrits aux cours 601-211 et 350-901 (dont cinq comme tuteurs), et 28 ont été inscrits au cours 601-111 (dont cinq comme tuteurs). Il fut impossible d'intégrer tous ces cours dans l'horaire régulier. L'un dut être relégué durant la période du mercredi de 12:00hres à 3:00,

ce qui oblige à négocier avec l'Association des étudiants.

Février-mars-avril Le programme est en opération. Une rencontre a été préparée entre les tuteurs et les pupilles à l'école Roberval. M. le Directeur était présent, Mme Nadine Serrouya, Thérèse Belzile et Yves Michaud, les 15 tuteurs et les 15 pupilles. La présence de la responsable de la bibliothèque complétait le groupe des personnes impliquées dans l'opération tutorat.

Des rencontres ont lieu régulièrement avec Dr Schwartz.

Mai 77 Les étudiants inscrits dans les cours de correction en lecture sont soumis à des tests après traitement. De même pour les pupilles de l'école secondaire Roberval. L'ensemble des autres mesures est assuré par les rapports des étudiants qui ont été remis à la fin de la session. Ces rapports concernaient l'étudiant lui-même et le pupille dans le cas des tuteurs.

Juin 77 Une analyse détaillée des résultats en lecture est faite dont le rapport général fait état. D'autres analyses sont entreprises quant à l'aspect perception, quant à la fidélité du test de français. Certains résultats secondaires sont ajoutés au présent rapport. Des analyses sur la relation entre les tests de lecture et de perception sont en cours. Cette analyse est rendue nécessaire du fait que les changements constatés après traitement en perception mécanique et intelligence générale sont tels qu'il faut penser que le traitement global et surtout le cours 901 a eu pour effet d'améliorer grandement la perception des élèves et même leur performance au test d'intelligence générale. Faut-il croire que le traitement sur les habiletés en lecture implique un apprentissage perceptif fondamental et un développement des structures intellectuelles? La question méritera une attention particulière durant l'année 1977-78.

Au début de juin, Yves Michaud a pu se rendre à Vancouver au Congrès de la Société canadienne de psychologie où plusieurs conférences traitaient de problèmes ou de techniques vécus dans le présent projet. Ainsi l'enseignement tutorial, l'enseignement et la formation technique,

la modification du comportement, l'estime et le contrôle de soi, la fidélité des mesures behaviorales, les mouvements de l'œil en lecture. Certaines personnes importantes rencontrées: Keith Kenneth, coordonnateur pour le Conseil International de psychologie, Ernest G. Poser, Mireille Mathieu, John Allen, Jerry Willis, Nelvin K. Komoda et Géraldine Schwartz. Chacune de ces personnes est reliée à des recherches de fond qui touchent à notre recherche.

Le 16 juin Thérèse Belzile se rend au congrès international de San Francisco sur les techniques behaviorales et la lecture.

II. Problèmes opérationnels

On peut considérer que les résultats obtenus au cegep de Rosemont sont remarquables si on considère les difficultés qui se sont produites en cours de route. D'une part, ces difficultés rendent moins scientifiques les résultats mais d'autre part auraient pu être à l'origine de résultats bien moins significatifs. Voici, en résumé, les principales difficultés:

1. Le retard occasionné au testing en novembre par le fait de l'occupation du collège par les étudiants les jeudi et vendredi de la semaine où se faisait le testing. Celui-ci avait lieu dans les cours de français 601-111 avec la collaboration des professeurs. Ce retard fut comblé, en partie seulement, 2 semaines plus tard.
2. Le bris d'équipement du lecteur OPSCAN à John Abbott et Rosemont a retardé de deux semaines le PRINT OUT des résultats. Conséquemment, les lettres contenant les résultats individuels et surtout celles adressées aux plus faibles et leur demandant s'ils voulaient s'inscrire au programme expérimental, correctif ne parvinrent aux intéressés qu'après le 22 décembre. Les réponses n'arrivèrent que la deuxième semaine de janvier, ce qui provoqua la troisième difficulté ci-après.
3. La troisième difficulté vint de l'impossibilité d'introduire les quatre cours expérimentaux à l'intérieur du programme de cours régulier et d'obtenir des groupes de dimension égale.

Ce qui donna les résultats suivants:

- a) Le groupe A eut le cours 901 le mardi de 11:00hres AM à 2:00 hres PM., mais le groupe dû être réduit à 8 personnes.
- b) Le groupe B eut le cours 601-111 dans un horaire régulier le mardi de 11:00 hres AM à 2:00 hres PM, mais fut réduit à 15 personnes. D'autre part, ce groupe dut prendre le cours 901 le mercredi PM de 12:00 hres à 3:00 hres. Ce qui occasionna des difficultés avec l'association étudiante qui avait obtenu qu'aucun cours ne se donne durant cette période. Une journée fut perdue de ce fait.

c) Le groupe C eut le cours 601-111 le jeudi de 11:00 hres AM à 2:00 hres PM., et fut le groupe le plus consistant avec 28 personnes.

4. La quatrième difficulté vint du retard occasionné par la production des divers matériaux surtout ceux des tuteurs. Le service de dactylographie et l'impression de ces matériaux pour les étudiants a pris plus de deux semaines parfois, provoquant ainsi des retard et imprécisions assez graves dans la formation aux techniques et aux stratégies et dans leur application.

5. Une autre difficulté est née de la fermeture du collège durant plus de trois semaines. Pendant ce temps, aucun contact n'eut lieu avec les étudiants et surtout les tuteurs même si ceux-ci ont continué à voir leurs pupilles (sauf un tuteur qui a abandonné l'école). Les autres étudiants qui étaient jumelés deux à deux ont pour la plupart laissé tomber leurs rencontres à deux.

6. Certaines mesures subjectives développées selon une échelle objective (1 à 5) faites après traitement que dans les groupes A et B, i.e. dans les groupes inscrits au cours 350-901, soit dans l'apprentissage sur la maîtrise du comportement.

7. Enfin, dans la comparaison des résultats avant et après entre les sous-groupes, certaines analyses sont faibles en égard au petit nombre d'individus dans ces sous-groupes, v.g. tuteurs plus 901 (5 personnes) vs non-tuteurs plus 901 (3 personnes), tuteurs plus 211 (3 personnes) vs non-tuteurs plus 211 (22 personnes).

NOTE: Il faut pourtant souligner ici la collaboration assidue qui a été obtenue des diverses autorités du collège, des divers services pédagogiques, informatique, financiers, services d'imprimerie, et même de secrétariat parfois. Le département de français a aussi collaboré et facilité la tâche de l'équipe de Rosemont.

III. Corrections pour l'année 1977-78

1. Le testing se fera à la fin septembre, ce qui laissera amplement de temps pour la programmation des PRINT OUT, l'analyse, le choix de la population des "dangereusement faibles", l'envoi à chacun des résultats individuels, et l'organisation des cours expérimentaux à l'intérieur de la confection régulière de l'horaire pour la deuxième session. Ce testing est cependant lié à la création d'un test d'habileté en lecture par l'équipe M. et Mme Serrouya.
2. Le programme informatique concernant le test des habiletés en lecture a maintenant été transféré au cegep de Rosemont et corrigé ce programme vaudra pour le prochain test en voie de création. Le programme informatique pour le test de français est fait. Celui du test de perception mécanique est en voie de réalisation.
3. Les principaux matériaux sont prêts. Seule la correction de la langue reste à faire et sera terminée en décembre 1977. Il se fera des ajouts à certains de ces documents.
4. Les mesures dans les groupes expérimentaux et le groupe contrôle sera fait d'une manière plus rigoureuse et plus complète.
5. Enfin, l'analyse des résultats et après selon le traitement sera menée avec plus de célérité parce qu'il n'y aura que Rosemont, que les programmes informatiques seront prêts.
6. Enfin la grande population étudiante totale sera celle de tous les nouveaux, si tout fonctionne normalement au cegep. Nous aurons dès lors une plus grande population de "dangereusement faibles".
7. Il faut aussi remarquer que les stratégies de traitement seront appliquées avec plus de rigueur en 350-901, en 601-211, en tutorat ou non-tutorat. On pourra sans doute mieux voir les effets dus à l'un ou l'autre des facteurs contrôlés.

IV. Mesure subjectives des objectifs généraux

A la question, mesurée sur une échelle de 1 à 5, de savoir si les 8 objectifs généraux ont été atteints, la moyenne des tuteurs a une réponse de 4.⁰³ tandis que les non-tuteurs ont une moyenne de 3.⁸⁴.

La mesure des réactions verbales à la lecture faite semaine après semaine permet de découvrir que les attitudes ont été de plus en plus nettement positives à l'égard de la lecture, et cela s'est vérifié dans 2 des groupes expérimentaux soit le 901, et le groupe 901-211.

Sur les travaux impliquant un apprentissage des comportements en vue de maîtriser la technologie du comportement et la maîtrise de son propre comportement, un graphique de moyennes exécuté pour le groupe 901 et un graphique pour le groupe 901-211 ont donné des résultats remarquables, i.e. une progression très nette des comportements restrictifs en fonction des comportements indésirables. La mesure se faisait jour après jour sur une période de 20 jours maximum pour les 2 groupes.

V. Mesures subjectives des comportements-cibles

Selon l'avant et l'après sur une échelle de 1 à 5, les facteurs mesurés sont les suivants:

1. découverte de l'idée principale
2. détails
3. suite des idées
4. généralisation
5. analyse d'un roman
6. complétion des fiches de lectures
7. organisation du travail
8. indépendance et autonomie
9. attitude générale.

Résultats: 1. selon l'avant et l'après, pour l'ensemble de ces cibles, la moyenne générale passe de 2.465 à 3.710.

2. La moyenne des non-tuteurs passe de 2.30 à 3.68.

3. La moyenne des tuteurs passe de 2.63 à 3.74.

4. La moyenne du groupe 901 - tuteurs passe de 3.42 à 3.84 tandis que la moyenne du 901 - non-tuteurs passe de 2.22 à 3.50. La moyenne du groupe 901 et 211 - tuteurs passe de 2.26 à 4.05 tandis que la moyenne des non-tuteurs passe de 2.66 à 4.17. La moyenne du groupe 211 - tuteurs passe de 2.22 à 3.33 tandis que la moyenne du groupe 211 - non-tuteurs passe de 2.03 à 3.49.

VI. Tableau général des développements en perception mécanique mesuré par le T-test.

- NOTES: 1. La perception a été mesurée avant et après.
2. 3 sections du test touchaient diverses dimensions de l'intelligence générale, soit arithmétique 1, similitude, et arithmétique 2, (T_1 , P_1)
3. Les résultats globaux sont significatifs à 0.000.
Les résultats globaux en T_1 , P_1 sont significatifs à 0.000.
Les résultats globaux en T_2 , P_2 sont significatifs à 0.000.
4. Il faut conclure que le traitement global des cours 901, 901-211, 211 a provoqué à la fois un développement perceptuel et un développement intellectuel. Quelle que soit la nature de la perception qui a été touchée et des dimensions intellectuelles touchées, il reste qu'il y a là un développement hautement significatif et qui augure bien pour la suite de la recherche. Des analyses subséquentes plus détaillées nous apprendront probablement la nature des aptitudes qui ont subi un apprentissage correctif important, et quels facteurs en particulier ont été les plus significatifs.
Pour le moment, il semble que ce soit le cours de Psychologie 901 qui se manifeste le plus significatif. Mais le petit nombre de sujets traités en psychologie 901 (23) ne suffit pas pour qu'une conclusion soit considérée comme définitive.

VII. Le tutorat

A) Malgré les difficultés rencontrées et décrites auparavant, il faut affirmer que la formule du tutorat a apporté des fruits réels, puisque la moyenne de points accumulés par les tuteurs selon leur contrat a été de 179.5 alors que le contrat obligatoire ne comportait que 150 points.

2 tuteurs ont obtenu plus de 250 points (A⁺)

6 tuteurs ont obtenu plus de 200 points (A)

6 tuteurs ont obtenu plus de 150 points (B)

B) Dans leur travail auprès d'un pupille de l'école Roberbal, il faut remarquer le manque de locaux qui a nui au climat des rencontres. Pourtant les résultats ont été plus que satisfaisants du côté des pupilles.

Il faut mentionner que 10 tuteurs ont eu le maximum de 10 rencontres avec leurs pupilles. Deux tuteurs ont eu huit rencontres avec leurs pupilles. Un tuteur a eu cinq rencontres avec un pupille, puis cinq rencontres avec un autre pupille: son premier pupille a abandonné, et le tuteur du second avait abandonné les études collégiales. Un autre tuteur n'a pu avoir que quatre rencontres avec son pupille.

VIII. Le test de français.

Le test de français créé par un membre du département de français a été passé à 594 étudiants avant le traitement correctif en lecture. Le but était de voir à normaliser ce test, et de voir les acquisitions des nouveaux qui entraient au cegep.

Le test comporte cinq sections:

1. Le vocabulaire.
2. La nature des mots.
3. L'orthographe grammaticale.
4. L'orthographe d'usage.
5. La fonction des mots.

Une analyse statistique des résultats a été faite de chaque item à partir de trois critères: indice de discrimination selon que l'item discrimine bien entre les forts et les faibles, indice de difficulté selon que l'item est réussi par les forts et non par les faibles, et l'indice de distribution selon que l'item a eu un pourcentage assez élevé de bonnes réponses.

Conséquemment, 59 items sur 100 ont été rejetés. Les 41 retenus se répartissent comme suit:

Section	I :	5 items
Section	II :	9 items
Section	III :	11 items
Section	IV :	7 items
Section	V :	9 items

En conséquence aussi, nous n'avons pas cru qu'il était bon de faire subir ce test après traitement parce que le pourcentage d'items dont l'interprétation était équivoque était trop grand.

L'expérimentation de 1977-78 se fera à partir des items retenus et donnera lieu, nous le croyons, à une normalisation et une fidélité beaucoup plus adéquate.

VI RESULTS

OVERVIEW

The results presented in Tables 8, 9, 10a, 10b, 10c, and 10d will demonstrate that the researchers at John Abbott, Champlain, and Rosemont Colleges have developed a program whose content, procedures and strategies will significantly improve reading efficiency in "High Risk" college students.

In order to review these results it is important to consider the objectives of this research which were proposed in March, 1976, excerpt p.6 (proposal for research - March, 1976).

OBJECTIVES

1. To develop an effective and economical method to improve reading efficiency and academic effectiveness at the college level.
2. To develop an effective method to promote the development of skill in the use of the English/French language.
3. To develop an understanding of the affective, cognitive and social development in Cegep students as it relates to their personal development.
4. To develop effective strategies for influencing future personal development in desired directions using:
 - a) learning theory
 - b) principles of motivation
 - c) contingency management procedures

5. To apply the theories learned in class to a real life experience.
6. to expand the research on the use of a community institution as a laboratory resource for teaching.
7. To develop, and perfect the most effective procedures in Phase One into a systematic approach to remediate reading disabilities in college students which can be integrated into the Psychology and English/French curricula of both Anglophone and Francophone Cegeps.
8. To train faculty in both Anglophone and Francophone Cegeps to run this program.
9. To develop procedures for the training of future staff members within the 3 participating Cegeps, as well as interested colleagues throughout the province.

In addition it is important to consider the hypothesis which forms the basis of the design of this research, excerpt p.7 (Proposal for research - March 1976):

"It is hypothesized that "high risk" Cegep students whose high school grades and reading scores (identified by standardized tests) are low will improve their reading and language skills, and their academic efficiency, by participating in a cluster of courses in Psychology (350-901-69) and English (603-104-75)/French (601-901-73) where they would learn:

1. Strategies for Task Organization
2. Self-management Techniques
3. Principles of Learning
4. Motivation Theory
5. Human Development
6. Reading Efficiency Techniques
7. Language Skills

In addition, these students would be trained as reading tutors, and contingency managers, and would be charged with teaching these skills to grade seven students who have been identified as disabled readers."

"HIGH RISK" COLLEGE STUDENTS AS TUTORS

In this research, the high schools in the college community are used as a laboratory source for teaching (Objective 6). This research has demonstrated that fieldwork in the high schools is a most effective pedagogical experience for Cegep students. In order for the high schools to continue to be available to college students, the teachers and administrators must feel that this program is useful in helping high school students who are disabled readers. It is therefore most important that the Cegep students perform well as tutors. Tables 8, and 9 present the results of the high schools during the winter semester.

High school students are pre-tested in October and post-tested at the end of April following the 10 week tutoring program. During that time average students are expected to progress .7 of a grade. However, students who are disabled readers have been progressing at 70 percent of that rate. They would therefore be expected to progress .5 of a grade during that period.

Table 8 shows that students at Pierrefonds, Le Moyne, and De Roberval (grade 8) have made substantial improvement beyond the expected rate. However, the average results masks the progress of many individual students. For example at De Roberval (grade 7) 6 of the 9 students have made important progress beyond the expected rate. The poor performance on the posttest of 3 subjects whose postscores were well below their pretest scores masked the progress of these students. The same factor occurred at Beaconsfield, Centennial and MacDonald-Cartier where more than half the subjects improved their scores by 1.5 grades or more.

The high school teachers report that the program is most effective for their students, and even when test results are inconclusive the effect is felt in the classroom. As a result the 7 high schools (Macdonald High School participated in the 1st semester program at John Abbott) have indicated their willingness to participate in the program again. (Letters from the high school principals regarding the program are included in Appendix E of this report.)

TABLE 8

HIGH SCHOOL GRADE SCORES
GATES MACGINITIE READING TEST

SCHOOL	GRADE	<u>n</u>	COMPOSITE GRADE PRE	SCORES POST	GAIN IN GRADES
Pierrefonds	8	28	5.4	7.7	2.3
Beaconsfield	7	25	5.7	6.3	0.6
Centennial	7	16	6.1	6.9	0.8
Le Moyne d'Iberville	7	12	5.1	6.3	1.2
MacDonald-Cartier	7	16	5.1	5.5	0.4
De Roberval	8	3	6.3	8.3	2.0
De Roberval	7	9	5.6	5.6	0.0

NOTE: The composite score is made up of the subscores in Speed, Vocabulary, and Comprehension.

The results of the high school program cannot be measured only by performance on a standardized test. Detailed records of their performance in the program is provided by the tutor's report which is based on objective weekly observation reports. A summary of these weekly reports is prepared by the College students, for each client, and is presented as part of the requirements for the completion of their courses.

Table 9 presents a summary of the progress made by high school students in the specific target behaviors of this program. It should be noted that students make substantial progress in improving speed and stamina (Rate of progress - Dash speed 80.72%; Sustained Speed 29.90%; Stamina 36.64%). In addition, according to the observations of the tutors, progress is made in each of the target behaviors.

As well, 95 out of 101 students, 94.1% completed their reading contracts; 50 students received a grade A⁺ which means they read at least 10 books during the 10 week period. Many of these students read more than 15 books. The average number of books read by the high school students was 9. (Tutors, who were parallel reading, get substantial practice in this way.)

In general, it may be concluded that the high school program was successful. It provides a solution, in spite of the limited number of tutors available to each high school, (Pierrefonds teachers had 95 potential clients - John Abbott provided 28 tutors) to the high school administrators and teachers for the important problem of teaching reading

TABLE 9

TARGET BEHAVIORS - HIGH SCHOOLS

This form should be used to tabulate your opinion about your client's progress, in a reasonably objective, measureable form. Rate your client's presenting behaviors on a scale of 1-5. Use the difficulty of baseline exercises he can do for the prescore.

Please indicate the target behaviors you worked on by a check mark. Rate your client's performance after the program on a scale of 1-5. Use the difficulty of exercise your client can handle successfully to help your evaluation.

Tutor _____ Client _____ School _____			
TARGET BEHAVIORS		PRE	POST
Increase Speed	dash speed	<u>165.3</u> w.p.m.	<u>298.5</u> w.p.m.
	sustained speed	<u>210.1</u> w.p.m.	<u>272.9</u> w.p.m.
Increase Stamina	time at 1 session	<u>26.2</u> min.	<u>48.9</u> min.
Find the main idea		2.6	3.7
Detailing		2.4	3.5
Sequencing		2.2	3.7
Generalizing		2.5	3.7
Analyzing a novel		2.4	3.6
Filling out reading form		2.5	3.7
Organization		2.9	3.8
Independence		2.8	3.8
Attitude		3.0	4.2
No. of contracts completed <u>95/101</u>			
A+ <u>50</u> (250+ pts.) A <u>25</u> (200 pts.) B+ <u>10</u> (175 pts.) B <u>10</u> (150 pts.)			
% of contracts completed <u>94.1%</u>			
Average No. of books read <u>9.0</u> total: <u>2.7</u> easy; <u>3.4</u> medium; <u>2.9</u> hard			

NOTE: This table is based on the average of 101 reports.

to disabled readers. In this way the colleges provide an important service to the high schools in their community. Their support also insures that future college students will be able to continue to benefit from the fieldwork program in the high schools.

COLLEGE READING - FINAL RESULTS - DIAGNOSTIC READING TEST

Tables 10a, 10b, 10c, 10d present the final results on the Diagnostic Reading Test for students in this program. It will be recalled (see research design p. 63) that at John Abbott group one is the experimental group. These students had the full program (Psychology (350-901), English (603-104), tutor-training, and fieldwork with high school students. At Champlain groups 5 and 6 were the experimental groups (group 6 students explored the peer tutoring process). At John Abbott groups 2, 3, and 4 acted as control groups. Group 2 students had Psychology (350-901). In this course they were also trained as reading tutors and they did fieldwork with high school students. The results of these students reflect the power of the psychology course and the tutor-training, and fieldwork to produce improvement in reading. Group 3 students took Psychology(350-901) which included training in the self-management of study behavior. Group 4 students were expected to attend 6 lectures on Reading Efficiency and Self Management Procedures. In fact few of them did so. The 12 students who took the posttest were from a group of more than 60 students. Since the control students

receive no credit for the lectures, and since they are already reluctant readers, and people who have well established avoidance to reading and to academic tasks it is almost impossible to get them to write a post test. Particularly since they knew they did poorly in the pretest and are unlikely to have improved. As a result the 12 students who do write the test are not a random selection in the way the students in the other groups are. They are likely those who feel they have a good chance at demonstrating that the first test did not reflect their best performance. Consequently the results of group 4 at John Abbott ($n = 12$) and group 8 at Champlain ($n = 11$). [The same problem occurs at Champlain] should be considered with these factors in mind. The students in group 7 at Champlain took the English course (603-104). As well they received tutor-training and did fieldwork in the high schools. The results of these students reflect the power of the English course, the tutor-training and fieldwork to improve reading efficiency.

There were no significant differences in the pretest scores at any of the colleges. This indicates that the random division of subjects was effective, and that the results are due to the experimental procedures used.

Table 10a presents the final results at John Abbott College. It should be noted:

1. That the experimental group (group 1) shows significant improvement on the post test in each of the categories. The improvement in reading

efficiency is 123% compared to 28.26% for group 2, 15.55% for group 3 and 41.29% for group 4. The control groups do not show significant improvement in any of the categories except for group 4 in reading efficiency.

2. Group 1 is also significantly better than groups 2, 3, 4 at the .01 level of significance over all. Control groups made substantial gains. (See % of I column) in each category.

TABLE 10b

Table 10b presents the final results at Champlain. It should be noted that

1. The experimental groups 5 and 6 make significant gains on the posttest. The improvement in reading efficiency (50.74% group 5, 57.65% - group 6) is substantially better than the improvement of the control groups (21.71% - group 7, 22.50% - group 8).
2. Analysis of variance of the final results shows

NOTE: Reading efficiency is a score which reflects performance in speed, vocabulary, and comprehension. Students who achieve the total score of 70 for example, by reading at 500 words per minute are considered more efficient readers than students who achieve the same score by reading 250 w.p.m. The reading efficiency score is calculated by multiplying the total score by a factor of one for every 25 w.p.m. (i.e. Total score 70 - w.p.m. 500 = 20×70 , score 70 at 250 w.p.m. = 70×10).

that at Champlain there are no significant differences between groups overall. It should be noted however, by examining the rate of increase, that the experimental groups make a much more substantial improvement than do the control groups.

TABLE 10c, 10d

Tables 10c and 10d present the final results at Rosemont. Rosemont was in the first year of the program. Substantial difficulties occurred in translating documents and in finding appropriate and equivalent materials in French. In fact, to a large extent, these materials are not available in French and substitutes have to be created by the Francophone faculty. Considering these issues and the fact that both members of the Francophone team were working on the program for the first time, and were being trained while the program was in operation, the results are most encouraging, especially when one considers the additional problem of a disrupted semester due to "student - management" confrontations.

At Rosemont each of the groups was experimental since this was essentially a pilot study:

Group 9 students took the Psychology course (350-901) and had tutor-training. Five of these students (9a - see table 10d) tutored at de Roberval High School. The rest worked informally with their peers (9b).

Group 10 students took the Psychology Course (350-901) and the French course (601-901-73). They had tutor-training and 5 of them (10a) tutored high school students at de Roberval. The rest worked informally with their peers (10b).

Group 11 students took the French course (601-901-73). They had tutor-training and 3 of them did the fieldwork at de Roberval (11a). The rest worked informally with their peers (11b).

It should be noted that:

1. The results at Rosemont are inconclusive. There were no significant differences in post scores, and no significant differences between groups. However, perusal of Tables 10c and 10d will show that substantial gains are made by the students in each of the categories. The improvement in reading efficiency for all students is most encouraging.

TABLE 10a
FINAL RESULTS - DIAGNOSTIC READING TEST
JOHN ABBOTT COLLEGE

Group	N	Speed (w.p.m.)		Vocabulary		Rate of Comprehension		Total Score		Reading Efficiency	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1-E	29	249.76	505.14	33.66	42.24	204.91	305.80	61.55	69.41	616.03	1,376.97
			102.25		25.50		49.24		12.77		123.52
			t=		t=		t=		t=		t=
			7.72		3.17		2.89		2.03		5.39
2-C	16	267.56	303.81	31.63	38.25	199.42	201.13	59.88	62.50	621.56	797.19
			13.50		20.93		0.86		4.38		28.26
			N.S.		N.S.		N.S.		N.S.		N.S.
3-C	19	255.11	277.11	32.63	37.95	202.93	199.34	61.05	66.06	608.11	702.68
			8.62		16.30		1.77		8.10		15.55
			N.S.		N.S.		N.S.		N.S.		N.S.
4-C	12	250.83	322.83	32.91	39.25	176.55	185.15	58.00	63.75	579.50	818.75
			28.70		19.26		4.87		9.91		41.29
			N.S.		N.S.		N.S.		N.S.		3.51

Group 1E (Experimental) - psych. Eng. T.T., F.M.
Group 2C (Control) - psych. T.T., F.M.
Group 3C (Control) - psych.
Group 4C (Control) - attention placebo

± of 1 = rate of increase

S = significant diff. between pre and post test score ± = .05 level, ** = .01 level, N.S. = no significant difference

NOTE: Group 1 is also significantly different from groups 2, 3, 4 at .01 level overall.

TABLE 108
FINAL RESULTS - DIAGNOSTIC READING TEST
COLUMBIA

GROUP	N	Speed (w.p.m.)		Vocabulary		Rate of Comprehension		Total Score		Reading Efficiency	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
5-E	24	243.04	315.00	29.33	39.17	174.31	202.63	55.40	65.16	530.56	800.38
			29.50		33.55		16.25		17.47		50.74
			t=		t=						t=
			3.28								2.06
6-E	20	266.60	361.80	27.25	39.25	207.92	208.94	54.50	63.50	555.70	891.80
			35.71		44.04		0.19		16.50		57.65
			t=		t=						t=
			2.4								2.34
7-C	28	301.11	294.36	28.79	38.07	213.49	183.40	54.93	62.50	594.57	723.64
			2.24		32.23		14.09		13.78		21.71
			t=		t=						
8-C	11	259.67	260.67	31.22	44.11	191.90	192.78	50.89	70.68	597.00	731.33
			3.47		41.29		.005		20.02		22.50
			t=		t=						

Group 5E (Experimental) - Psych, Eng, T.T., F.M.
Group 6E (Experimental) - Psych, Eng, T.T., F.M.P.
Group 7C (Control) - Eng, T.T., F.M.
Group 8C (Control) - no special treatment
of 1 = rate of increase

* = Significant differences between pre and post test scores. * = .05 level, ** = .01 level, N.S. = no significant differences.

NOTE: There are no significant differences between groups overall.

TABLE 10C
FINAL RESULTS - DIAGNOSTIC READING TEST
ROSENTH

GROUP	n	Speed (w.p.m.)		Vocabulary		Rate of Comprehension		Total Score		Reading Efficiency	
		Pre	Post	% of I S	Pre	Post	% of I S	Pre	Post	Pre	Post
9-E	8	157.29	173.00	9.99 N.S.	29.25	35.13	20.10 N.S.	77.52	109.58	41.36 N.S.	58.63
10-E	12	164.34	164.75	0.25 N.S.	29.08	34.00	16.92 N.S.	107.56	112.73	4.81 N.S.	58.75
11-E	26	145.50	172.46	18.53 N.S.	27.69	43.46	56.95 N.S.				76.92
								49.13	58.63	310.19	405.09
								50.50	58.75	337.38	442.12
								52.96	76.92	326.50	472.49
											30.59
											31.05
											44.78
											N.S.
											N.S.
											N.S.

Group 9E (Experimental) - psych + Tutor's Training (Fieldwork n = 5)

Group 10E (Experimental) - psych + French + Tutor's Training (Fieldwork n = 5)

Group 11E (Experimental) - French + Tutor's Training (Fieldwork n = 3)

% of I = rate of increase

S = significant differences between pre and post test scores * = .05 level, ** = .01 level, N.S. = no significant differences.

NOTE: There are no significant differences between groups overall.

TABLE 10d

FINAL RESULTS - DIAGNOSTIC READING TEST
ROSEMARY - GROUPS DIVIDED INTO TUTORING AND NON TUTORING CELLS

Group	n	Speed (w.p.m.)		Vocabulary		Rate of Comprehension		Total Score		Reading Efficiency	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
9a-tut.	5	159.36	167.60	29.40	35.00	79.37	35.27	49.20	58.60	315.22	391.76
9b - n.tut.	3	154.00	162.00	29.00	35.33	74.43	36.85	49.00	58.67	301.80	427.30
10a-tut.	5	179.42	186.00	31.60	33.80	97.38	5.33	53.80	57.80	391.38	436.12
10b-n.tut.	7	153.57	163.86	27.29	34.14	114.84	4.45	48.14	59.43	298.80	446.40
11a-tut.	3	149.13	154.00	29.67	32.67	92.05	36.63	55.00	60.33	246.06	371.60
11b-n.tut.	24	145.02	174.87	20.58	44.87	65.00	109.96	55.39	79.09	256.76	485.65

9a - experimental group - psych. + tutor's training + fieldwork (tutoring)

9b - experimental group - psych. + tutor's training

10a - experimental group - psych. + French + tutor's training + fieldwork (tutoring)

10b - experimental group - psych. + French + tutor's training

11a - experimental group - French + tutor's training + fieldwork (tutoring)

11b - experimental group - French + tutor's training

% of 1 = rate of increase : tut. - tutors at the high school : n. tut. - informal peer tutoring.

NOTE:- There were no significant differences between groups overall.

DISCUSSION

The results of the experimental students at John Abbott and Champlain indicate the power of this program. When the program operates as designed "High Risk" college students make substantial and significant improvement in reading skills. Thus the hypothesis is confirmed.

It should also be noted that parts of the program also produce important gains in reading. Group 2 (Psychology, Tutor-training, and Fieldwork) at Champlain are valuable courses for "High Risk" college students. However, the particular nature of the problem for poor readers is such that the combined program which attacks the problem both from the technical (reading) and motivational aspect (Psychology) is much more powerful.

Although the results at Rosemont were inconclusive, the students made substantial gains in reading. It must be remembered that the program was in the pilot stage at Rosemont. As such the results are encouraging and the materials and techniques developed are being revised and improved for the experimental phase. Given the results at the Anglophone colleges in their second year of operation there is every reason to be optimistic about the potential of the program in French.

CONCLUSIONS

The results presented in Tables 10a, 10b, 10c, and 10d demonstrate that the objectives of this program have been reached (see p.109) and that the hypothesis (see p.110) that ONE OF THE BEST WAYS TO LEARN IS TO TEACH has been confirmed.

The program is now ready to be implemented as part of the regular curriculum of Anglophone colleges in Quebec. Procedures to that effect are already underway. In addition substantial progress has been made by the research team at Rosemont. The experimental phase at Rosemont should produce a similar result in French by June 1978.

VII IMPLICATIONS OF THIS RESEARCH FOR QUEBEC

The findings of this research indicate that the level of reading skills in Quebec are substantially below the North American average established 10 years ago. It appears that these skills are profoundly affected by family configuration and socioeconomic factors. The reading scores of students in middle and upper middle class suburban areas are significantly better than those in middle and working class areas. Large families and one parent families appear to mitigate against successful performance on intellectual tasks. At Rosemont where many of these factors are present together, reading scores are substantially inferior.

In the opinion of the author the current situation is the result of three major deficits:

1. Quebec students are taught to be passive learners by the current generation of teachers.
2. Sufficient emphasis is not placed on skills training, and in particular students do not learn models or strategies with which to approach intellectual tasks.
3. Current pedagogical strategies do not produce students who read for pleasure, and thus there is very little practice in reading.

The findings of this research show that even college students who are young adults can learn to read more efficiently when they become active learners. When they learn, by learning to teach, they perform much better than passive learners. It appears that systematically teaching "High Risk" college students strategies to approach academic

tasks, and teaching them to teach others these strategies,
is an effective pedagogical technique. In addition, practice
in reading is a key component. Most of the college students read
at least 10 books during the duration of this program. Many read
20 or more. Some students reported that they read more this semester
than in their entire previous life time. Combined with effective
strategies and active learning, practice produces a student who is
not only a more effective academic performer, but one who is a
more literate and cultured person. The implications for the educators
of Quebec are clearly defined by the results of this research.

In the face of objective findings we must recognize the
need for an effective program to develop reading skills at the college
level that is accessible to all the students of the province regardless
of language or region. The use of the current program as a model
for this purpose could be most effective:

1. The program has been designed to fit into the regular curriculum of the collegial system.
2. The materials have been prepared and are now available for distribution to educators in the province through John Abbott College in English. They will be available through Rosemont for September 1978 in French.
3. Trained teams are available in Quebec both in English and French to animate seminars and training programs for their colleagues.

In addition to dealing with the problem at the college level,
the problem should be dealt with more directly at the elementary and
high school levels. Curriculum needs to be revised to include the

systematic teaching of strategies to approach the academic task. Pedagogical philosophy needs to be changed so that students can become active learners. Teaching students to teach as a regular part of their learning process has the advantage of making the students articulate what they have learned and therefore forces them to interact actively with the material to be learned. It also provides the public school systems with a sufficient number of tutors to teach every student individually. The incorporation of the philosophy and technology of this program into the pedagogical philosophy of the school system could revolutionize education in Quebec. In fact, neither the philosophy nor the technology of this program are new phenomena. Teachers in the "one room school houses" of North America for the past 3 centuries were forced to provide each child with the opportunity to teach others, and teachers of students who were educated in the first half of the 20th century provided their students with at least some strategies to approach intellectual tasks. It is certainly conjecture, but it may be possible to consider that the absence of these factors in the current curriculum of Quebec schools has produced a generation of students who are less skilled in these matters than were previous generations.

It will be, of course, up to the readers of this report, and particularly the representatives of the "Service des Programmes" to publicize the findings of this research and to continue to support programs which will accomplish these important objectives.

It will be particularly important to the future of this province that all of its citizens have the opportunity to become efficient readers and literate people because these skills are the basis of performance in all intellectual tasks. Special emphasis should certainly be placed in areas where sociological phenomena create a built-in disadvantage.

VIII INTERNATIONAL IMPLICATIONS OF THIS PROGRAM

A search of the literature as well as the findings of the current research indicate that the development of efficient reading skills is a world wide problem. The basic philosophy of this program, which includes encouraging students to interact actively with the material they learn by teaching them to teach as a regular part of the learning process, and the systematic teaching of strategies to approach intellectual tasks, is applicable to all learners regardless of language or country of origin. In addition, the use of the behavior management technology to motivate students to stay at their task is not limited to a particular region of the world. It would be useful to speak about the findings of this research and to disseminate the published works that will result throughout the English and French speaking communities of the world.

This process has already begun. Substantial interest in this program, its materials, its publications, and its findings has already been expressed by the following institutions:

INSTITUTIONPLACE

Cegep D'Outaouais	Hull, Quebec
Vanier College	Montreal, Quebec
Concordia University - Faculty of Education	Montreal, Quebec
Comité de Co-ordination de Psychologie	Montreal, Quebec
Quebec Association for Children with Learning Disabilities	Montreal, Quebec
Seneca College	Toronto, Ontario
John Coutts Library Services	Niagara Falls, Ontario
Ontario Institute for Studies in Education	Toronto, Ontario
University of Saskatchewan	Saskatoon, Saskatchewan
Athabasca University	Edmonton, Alberta
Douglas College	New Westminster, B.C.
Ministry of Education of British Columbia	Vancouver, B.C.
Robert Service School	Dawson City, Yukon
College of Cape Breton	Sydney, Nova Scotia
Memorial University	St. Johns, Newfoundland
Memphis State University	Memphis, Tennessee, U.S.A.

Invitations to discuss the program that have been accepted to date by the research team:

<u>DATE</u>	<u>EVENT</u>	<u>PLACE</u>	<u>SPEAKER</u>
Feb. 14	Education conference Concordia University	Montreal	Schwartz
March 11	Seminar to Institute Program Cegep D'Outaouais	Hull	Schwartz
April 29	Seminar to Institute Program Douglas College	Vancouver	Schwartz
June 8	Annual Conference of the Canadian Psychology Association	Vancouver	Schwartz
August	International Council of Psychologists	San Francisco	Schwartz
Oct. 14	Council for Exceptional Children	St. Johns	Schwartz
May (1978)	International Reading Association	Houston	Woodward Grubert

Finally, the findings of this research, have been based on the objective, detailed and systematic analysis of the reading skills of young adults who attend college in Quebec.

The exploration of the applied use of psychological theory, and its methods and evaluative procedures has just begun. This research has demonstrated the potential of this technique to understand the complex phenomena involved in human learning. It is hoped that this process will continue.

Geraldine Schwartz, Ph.D.

Project Co-ordinator.

APPENDIX "A"

READING AND THE COLLEGE STUDENT

LE COLLEGIEN ET LA LECTURE

Abstract

Research findings at John Abbott College (program to develop reading efficiency and academic effectiveness in "high risk" Cegep students) demonstrate that a substantial proportion of the student population are incompetent readers. Readability ratings on texts used at the Cegep show that most texts used in 1976-77 would be more appropriate at the university level. It appears, however, that there are some solutions.

READING AND THE COLLEGE STUDENT

Reading skills of North American students in 1976 are well below standards established 10 years ago. This general decline is reflected in the results of the Diagnostic Reading Test taken by 1,711 entering students at John Abbott College, and Champlain College - St. Lambert.

Reasons for this decline are purely conjecture, but one important factor may be that curriculum in North American schools during the sixties and seventies tended to de-emphasize skill training. This has been particularly true in the high schools where teachers of the language arts were encouraged to emphasize creativity, oral expression and appreciation of literature. Curriculum builders hoped that this approach would foster an interest in reading and a taste for good literature, and that skills would develop as a result. Unfortunately this has not generally occurred, and reading for pleasure has not become a popular past time for high school students. This seems especially true for some students whose reading skills are below their grade level. A large proportion of these students are non-readers.

During the last four years the reading skills of more than 5,000 grade 7 and 8 students in 9 high schools on the West Island and the South Shore have been tested. Consistently 20-25% of these students test 1.5 to 4.5 years below their grade level. If this is true in middle class suburban schools, one can only wonder what the situation may be like in inner city schools.

Since skill training has not been emphasized, (reading specialists, and reading programs were rarely available even for those skills were most obviously limited) and since practice in reading did not generally occur, many of these students fell further behind as they proceeded through high school. As a result an even larger proportion reached Cégep without the appropriate skills required to perform reading tasks at the college level.

It is particularly the strategies with which to approach the reading tasks that are lacking. Fifteen years ago curriculum included specific models for these kinds of tasks. Teachers told students to "...buy pink note books, write in blue-black ink, have margins exactly 1-1/2 inches from the left corner of the page, introduce the topic in the first sentence, summarize in the last sentence, write the title last..." etc. Although this view was considered overly restrictive, it did provide students with at least one model. Bright students could adapt these, but at least all the students knew where to begin.

In spite of this rather gloomy picture, both high schools and colleges have discovered that these skills are eminently teachable. School administrators sensitive to this problem have begun to provide reading specialists trained to improve reading efficiency of all students, not only those in need of remedial help. The success of students at John Abbott and Champlain involved in the College Reading Research program has demonstrated that even college students who are substantially behind improve significantly in reading efficiency when they are motivated to do so by a dynamic compensative program.

Procedure

At John Abbott College 896 entering students took the Diagnostic Reading Test (D.R.T.). This represents close to 50% of first year students and should provide a large enough sample to allow a reasonably good indication of the level of skills at the college.

Results

Figure 1 shows the percentage and number of students who scored at or below the indicated percentile rank on the D.R.T. (which is standardized on a North American sample) using both college freshman and grade 12 norms.

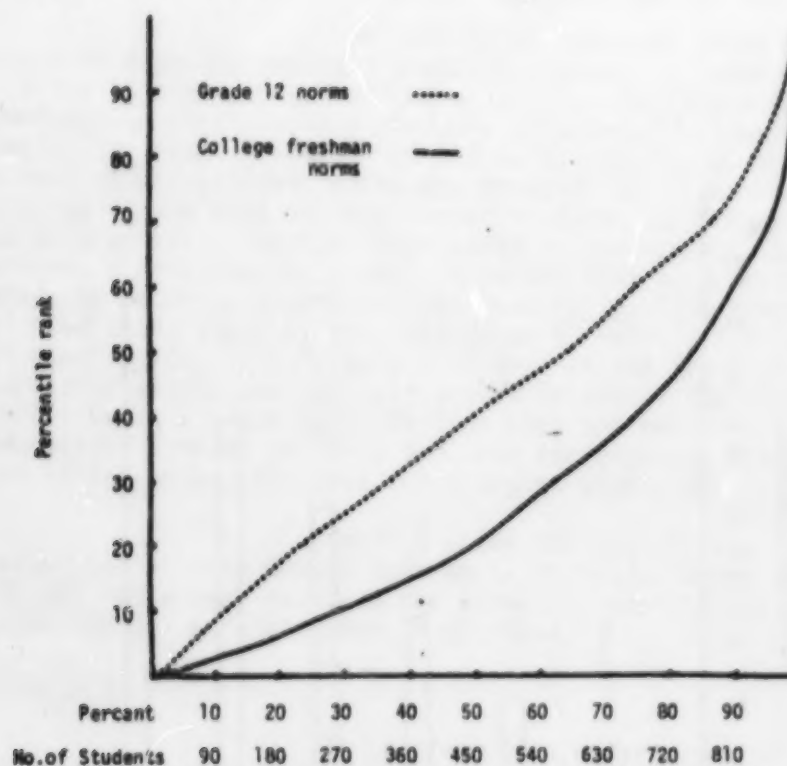
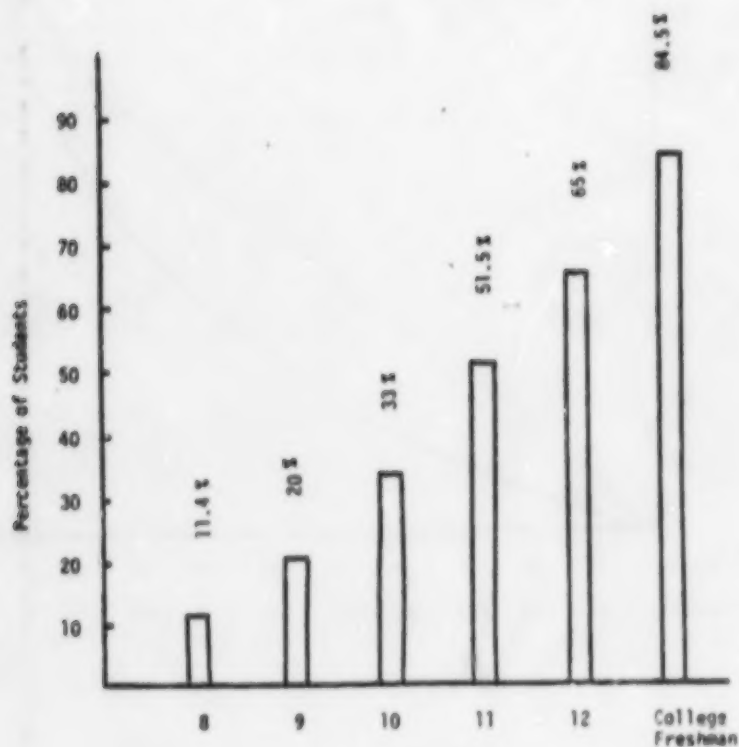


Figure 1. Cumulative graph showing percentage and number of entering students scoring at or below the indicated percentile rank on the "DIAGNOSTIC READING TEST" grade 12 and college freshman norms.

At the college freshman level 756 or 84.5% of the students tested scored below the 50th percentile. At the grade 12 level, 581 or 65% of the students scored below the 50th percentile. Normally one could expect that half the sample (448 in this case) might be below the 50th percentile. Figure 2 shows the percentage of students scoring at or below the 50th percentile of grade levels 8 through college freshman. The scores of 20% of the students fell below the 50th percentile for grade 9, 51.5% fell below the 50th percentile for grade 11, 65% below for grade 12, and 84.5% were below the 50th percentile for the college freshman level.



Grade level

Figure 2. Cumulative graph showing percentage and number of entering students scoring at or below the FIFTIETH percentile of the indicated grade level on the DIAGNOSTIC READING TEST.

In order to provide a more systematic and objective understanding of the level of reading tasks students were required to perform in order to successfully understand the material covered in class and to solve problems and write papers based on this material, departments were asked to send a selection of texts used in their subjects to be evaluated. The introductory text, which the tested students would be dealing with in the first semester, and a sample of texts used in subsequent semesters were considered an appropriate sample. Eighty-five texts from 16 departments were rated using the SMOG Readability Formula (1).

The linguistic measures which have been found to have the greatest predictive power in level of difficulty are word and sentence length. In SMOG grading, 10 consecutive sentences are randomly selected from each of the beginning, middle, and end of the book. In the 30 sentences the number of polysyllabic words are counted (3 or more syllables) and the square root of this number is taken to the nearest perfect square. Three is then added to the square root to provide a SMOG reading grade. A person must have reached this grade in order to understand the text fully. The standard error of prediction given by the SMOG Grade Formula is 1.5 grades. In other words, this formula will predict the grade of a passage correctly within one and half grades in 68% of the cases. Using SMOG scores, a grade of 13-16 indicates the need for a college education, a grade of 17-18 the need for graduate training, and 19 and above, the need for a higher professional qualification.

Table 1 shows the readability level of texts used at John Abbott College in 1976-77. Sixty out of 85 (70.6%) texts were rated at the grade 13 level or above. Forty-seven (55.8%) were at grade 14 or above.

Discussion

It is clear that a large number of students at JAC do not have efficient reading skills, and that a substantial percentage of the texts used are well above the level of understanding of many students.

College freshman norms were considered the most appropriate measure for Cegep students because grade 12 students in the original sample were still in high school and

were not faced with a college freshman curriculum. The level of difficulty of the texts used at this college suggests that students are expected to read and perform tasks at least equivalent to those required of college freshman. This is not to suggest that the faculty should be choosing easier texts. The choice of texts for college freshman curricula is limited, and good texts may also be difficult. As well, the texts used in universities are probably at least as difficult and it may be a disservice to students to provide easy texts at the Cegep level and lull students into expecting the same when they reach the university. An ultimate solution might be to provide the faculty (through Professional Development Seminars) and thus the students, with strategies for reducing the readability levels of texts they don't fully understand. Since the complexity of the vocabulary is clearly related to the difficulty of the texts, study guides and vocabulary exercises may be an interim solution.

Readability level of Texts used at JAC 1976-77

<u>Department</u>	<u>Text</u>	<u>Author</u>	<u>SMOG Grade</u>
Biology	Anatomy & Physiology	Anthony & Kolthoff	15
	Botany	Wilson, Loomis, Steeves	12
	Cell Biology	Avers	16
	Cell Biology, as Molecular Approach	Dyson	14
	Human Anatomy	Ashley	12
	Biology	Curtis	14
Chemistry	Introductory Chemistry-Module 3	Jalil & Hoewe	13
	Introductory Chemistry-Module 2	Jalis & Hoewe	13
	Introductory Chemistry-Module 1	Jalil & Hoewe	14
	Chemistry: A Modern Introduction	Brascia	14
Physics	Physics	Genzer & Younger	13
	Study Guide to Accompany Physics	Kyker	15
	Electricity	Pau, Pierce & Stief	13
	Physics	Tipler	18
	Physics (Study Guide)	Tipler	14
	Energy & the Conservation Laws	Stief	14
	Physics	Beiser	14
	Elementary Physics Ch. 1-13	Weidren Sells	13
	Ch. 20-28		15
	Fundamentals of Physics Ch. 1-12	Halliday & Resnick	12
	Ch. 22-32		13
Mathematics	Entering Basic	Sack & Meadows	14
	Calculus with Analytical Geometry	Swokowski	15
	Mathematical Preparations for General		
	Physics with Calculus	Davidson & Marion	13
Commerce & Bus. Admin.	College Algebra	de Jean	10
	Personnel	Strauss et al	12
	Essentials of Managerial Finance	Weston & Brigham	16
	Introduction to Canadian Business	Archer	15
	Fundamental Accounting Principles	First Canadian Edition	12
History, Economics, Political Science	Accounting for Management	Garner	15
	An Introduction to Political Science	Kahn et al	17
	The Russian Revolution	Medlin	14
	Economics	Lipsy, Sparks, Sneiner	14
Geography	The North American City	Yeates & Garner	16
Psychology	Understanding Human Behavior	McConnell	13
	Studies in Adolescence	Grinder	16
	The Psychology of Consciousness	Ornstein	15
	Self-Directed Behavior	Watson & Tharp	13
	On the Psychology of Meditation	Ornstein et al	19
	Behaviour Technology: Motivation & Contingency Management	Homme & Tosti	15
	The Developing Child	Bee	13
	Fundamentals of Scientific Method in Psych	Arnoult	15
	The Social Animal	Aronson	14

Food Technology	Food Service Management	Eshbach	12
	Basic Nutrition in Health & Disease	Howe	12
	Food Executive		12
Sociology	The Decolonization of Quebec	Milner	15
	The Tyranny of Work	Rinehart	15
	Introduction to Society (Theory)	Dansky	15
	Sociology	Popenoe	15
	Introduction to Sociology		17
Dental Hygiene	Oral Pathology	Kerr et al	15
	Dimensions of Dental Hygiene	Steele	15
	Pharmacology for the Dental Hygienist	Kutscher et al	17
	Dental Laboratory Technology	Cathey	14
Library Technology	Introduction to Librarianship	Gates	16
	ALA rules for Filing Catalog Cards	American Library Association	14
	Canadian Office Procedures	Reid	12
Nursing	Pregnancy & Family Health	Anderson et al	11
	Psychiatric Nursing	Mereness	15
	Pediatric Nursing	Marlow	13
	Textbook of Medical-Surgical Nursing	Brunner	13
	Psychiatric Nursing as a Human Exper.	Robinson	15
	Introduction to Patient Care	Kozier & Dugas	13
	Medical-Surgical Nursing	Luckmann & Sorensen	13
	Obstetric Nursing	Conant et al	14
	Administration of Medications	Dire	11
Police	Code Civil de la Prov. de Quebec	Wilson & Lafleur	12
	Procedure & Practice in Canadian Criminal Trials	Bolton	15
	Juvenile Delinquency	Teele	14
	Canadian Political System		17
	Environment, Process & Structure		17
	Crime & Society	Sykes	17
	Crime, Correction & Society	Johnson	17
	Adult Crime & Social Policy	Glaser	17
			17
Philosophy	Kant and the Nineteenth Century	Jones	15
English	The Catcher in the Rye	Salinger	7
	Billy Budd	Melville	12
	The Great Gatsby	Fitzgerald	10
	Agaguk	Theriatut	9
	New Horizons in English	Mellgren-Walker	7
	Wuthering Heights	Bronte	11
	The Diviners	Lawrence	7
	Communications	Fabun	12
	Great Jewish Stories	Bellow	11
	In Our Time	Hemingway	7
	Miss Lonelyhearts	West	8
	A Crash Course in Composition	McMahon	11
	The Epic of Gilgamesh	Sandars	11
	Huckleberry Finn	Twain	8
	Roughing It in the Bush	Moodie	10

The validity of the SMOG or any other readability formula should also be considered. SMOG implicitly makes two claims; that counting polysyllabic words in a fixed number of sentences gives an accurate index of the relative difficulty of various texts and that the formula for converting polysyllable counts into grades gives acceptable results. The argument has been raised that science texts contain a high proportion of technical words that are polysyllabic, but that the students familiarity with these words makes them less difficult and therefore the SMOG readability level of the text is unrealistic. While this possibility should be considered, an exercise initiated at a recent meeting with the Chemistry Department may be of interest.

Table 2

No. of Syllables	Project CGIPS:		Chem Drill #1		- Elements, Names and Symbols			
	Complete Table	Without distractors	Common Symbols	Uncommon Symbols				
	n_1	$\bar{x}_1$	n_2	$\bar{x}_2$	n_3	$\bar{x}_3$	n_4	$\bar{x}_4$
6	1	10%	1	10%	0	-	1	10%
5	8	30%	8	30%	0	-	7	27%
4	31	50.7%	29	51.5%	3	62%	18	38%
3	43	48.6%	41	48.0%	8	66%	20%	37%
2	19	62.5%	16	63.8%	9	62%	-	-
1	3	65.7%	0	-	2	70%	-	-

n = number of symbols considered

$\bar{x}$ = student success rate for each symbol.

$\bar{x}_1$ = complete table

$\bar{x}_2$ = complete table minus the elements with distractors that is symbols unrelated to the word (e.g. Na = sodium)

$\bar{x}_3$ = common symbols only

$\bar{x}_4$ = uncommon symbols only

In Table 2, the success rate on a chemistry test where the students were required to recognize the name of the element by its symbol, and the reverse, is analyzed in terms of the number of syllables in the name.

It is evident in Column 2 when the complete Table is used ($\bar{X}_1$) that the more syllables the word contains the harder it is to remember. This is also true when the symbols with distracters (symbols which do not use the first letter of the name of the element, e.g. Na = Sodium) are removed from the set. Even when common symbols are used, the one syllable words like gold and lead are easier than hydrogen and oxygen. In uncommon symbols, the very complex symbols are harder to remember than the less complex. While this little exercise certainly is not definitive, it provides some support for the belief that the complexity of the vocabulary affects the difficulty of the material.

As long as the level of the students abilities remains conjecture it is possible to ignore the necessity for some solution. Each of us accommodates the situation in our own fashion. However once the data begins to be more objective, it becomes difficult to ignore the necessity for at least beginning to look for a solution.

It was stated earlier that efficient reading skills were teachable, and that the success of our own students in the college reading research program has demonstrated that it is not too late to begin even at the Cegep level. This program, however, requires a person with expertise in teaching reading efficiency. It is not the job of the subject teacher to teach either reading, or strategies for approaching the reading task. However it appears that these skills should be taught at John Abbott College. A faculty member with this expertise would provide a double benefit. On the one hand, professional development seminars could provide the opportunity to make all faculty members aware of some of the strategies for effective reading so that students could have this help within the discipline area, and on the other hand students who need substantial help could take credit courses to improve their skills. It may be that given the data presented, the addition of such a person to the faculty should be a priority issue.

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Reading Research Team

1. G.H. McLaughlin. SMOG Grading - A New Readability Formula
Journal of Reading, V. 12, No. 8, May 1969. p. 639-646

CONDENSE

Selon une recherche du Cégep John Abbott (Programme pour développer la compétence en Lecture et le rendement scolaire chez les étudiants "dangereusement faibles" du collégial), la population étudiante actuelle souffre d'incompétence en lecture; en plus, les manuels utilisés dans les Cégep sont de niveau universitaire. Mais il y a des solutions possibles à ce problème.

LE COLLEGIEN ET LA LECTURE

Il semble que les habiletés en lecture des étudiants d'Amérique du Nord soient bien au-dessous des normes établies il y a dix ans. Ce déclin généralisé se reflète à travers les résultats au Diagnostic Reading Test obtenus par 1711 nouveaux qui entraient au Cégep John Abbott et au Collège Champlain à St-Lambert.

Les raisons de cette baisse sont conjecturales, mais un facteur important paraît être la tendance, dans les programmes des écoles nord-américaines au cours des années soixante et soixante-dix, à diminuer l'importance de l'exercice des habiletés. C'est particulièrement vrai dans les Ecoles Secondaires où les professeurs de langue ont été sensibilisés à mettre en valeur la créativité, l'expression orale et la critique littéraire. Les responsables de programmes ont cru que cette approche créerait l'intérêt pour la lecture, développerait le goût de la belle littérature, avec pour conséquence le développement des habiletés. Malheureusement, ces objectifs n'ont pas été atteints de façon générale

et le plaisir de lire n'est pas devenue un passe-temps favori des étudiants du Secondaire. Ceci paraît surtout vrai lorsque des étudiants ont des habiletés de lecture inférieures à leur niveau académique. Un grand nombre de ces étudiants sont des non-lecteurs.

Au cours des quatre dernières années, on a soumis à des tests d'habileté en lecture plus de 5,000 étudiants de Secondaire I et II dans 9 écoles secondaires de l'Ouest de l'île de Montréal et de la rive sud de Montréal. Il est apparu de façon claire que 20-25% de ces étudiants sont de 1.5 à 4.5 années inférieurs à leur niveau académique. S'il en est ainsi dans les écoles de banlieue où la population est de classe moyenne, on peut se demander si la situation n'est pas la même dans les écoles urbaines.

Etant donné le fait qu'on n'a pas accentué l'exercice des habiletés, (il était rarement possible d'avoir accès à des programmes de lecture, et à des spécialistes en lecture, et cela même pour ceux dont les habiletés étaient nettement inférieures), et étant donné le fait qu'en général, il n'y a pas eu d'exercice de la lecture, il est manifeste que la plupart de ces étudiants ont rétrogradé à mesure qu'ils avançaient dans leur secondaire. En conséquence, un plus grand nombre a atteint le Cégep sans les habiletés requises pour les tâches de lecture du niveau collégial.

Ce qui manque surtout, ce sont les techniques d'approche nécessaires aux lectures à faire. Il y a 15 ans, les cours tenaient compte de modèles précis pour ce genre de tâches. Les professeurs incitaient les étudiants à "... s'acheter un cahier d'écriture de tel format, à écrire dedans avec de l'encre bleue ou noire, à prévoir une marge de 1½ pouce sur le côté gauche de la page, à introduire le sujet dans une première phrase, à résumer la lecture dans la dernière phrase, à écrire le titre en dernier, ... etc". Même si cette façon de faire était nettement restrictive, elle avait comme avantage de présenter à l'étudiant au moins un modèle. Les meilleurs étudiants étaient capables d'adapter ces recettes, mais au moins les autres savaient par où commencer.

En dépit de ce tableau plutôt sombre, des écoles secondaires et des collèges ont compris que l'on pouvait indiscutablement enseigner ces habiletés. Des administrateurs scolaires sensibilisés à la question ont dé-

cidé de recourir à des spécialistes de l'enseignement de la lecture pour qu'ils contribuent à l'amélioration de l'efficacité de lecture de tout étudiant et non seulement à celle de l'élève atteint d'un sérieux handicap. Le succès qu'ont obtenu les étudiants de John Abbott et Champlain inscrits au Programme de recherche en Lecture au niveau collégial a démontré que même des collégiens très retardés peuvent améliorer leur efficacité en lecture de façon significative s'ils sont bien motivés par un programme dynamique et approprié.

PROCEDURE

Au Collège John Abbott, 896 nouveaux ont subi le "Diagnostic Reading Test" (D.R.T.). Ce nombre représente près de 50% des nouveaux et fournit un échantillon suffisant pour avoir une bonne indication du niveau des habiletés au Collège.

RESULTATS

La Figure 1 montre le pourcentage et le nombre d'étudiants dont les résultats au D.R.T. indiquent un rang en percentile semblable ou inférieur à la norme (le D.R.T. est standardisé à partir d'un échantillon nord-américain). Les normes employées sont celles de Collège I et de Secondaire V.

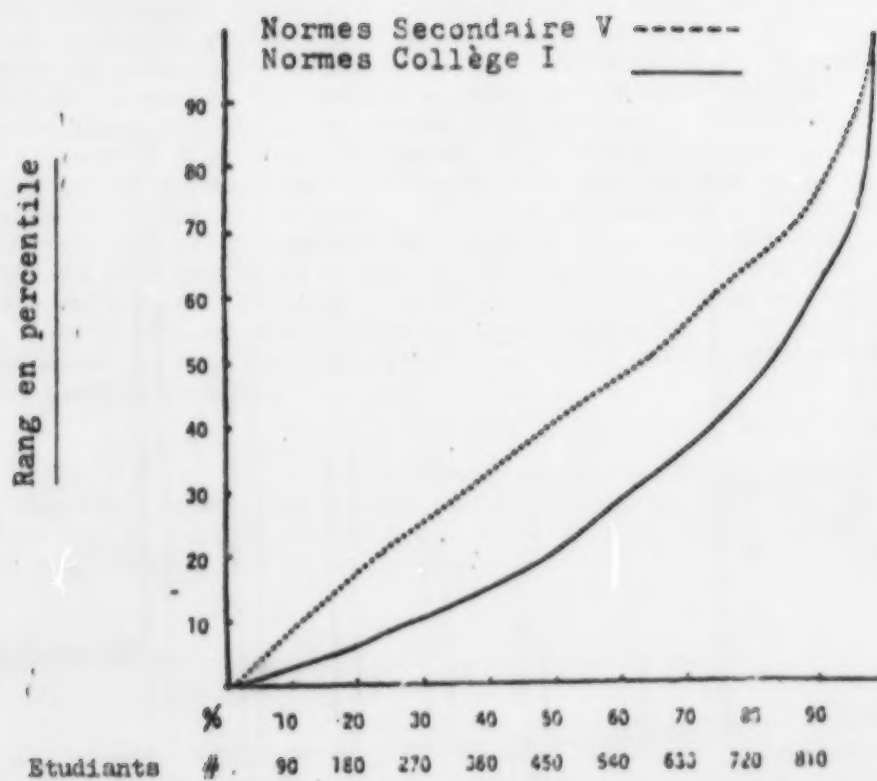


Figure 1. Graphique cumulatif du pourcentage et du nombre de nouveaux dont les résultats sont égaux ou inférieurs au rang en percentile tel que précisé dans le "DIAGNOSTIC READING TEST" pour les normes du Secondaire V et Collège I.

Au niveau de Collège I, 716, soit 84.5% des étudiants soumis au test ont eu un résultat inférieur au 50ième percentile. Au niveau Secondaire V, 581, soit 65% des étudiants soumis au test ont eu un résultat inférieur au 50ième percentile. On s'attendrait normalement à ce que la moitié de l'échantillon (448 ici) soit en bas du 50ième percentile. La Figure 2 montre le pourcentage d'étudiants ayant un résultat semblable ou inférieur au 50ième percentile et cela du niveau Secondaire I jusqu'à Collège I. Les résultats de 20% des étudiants sont sous le 50ième percentile de Secondaire II, 51.5% sous le 50ième percentile de Secondaire IV, 65% en-dessous de Secondaire V, et 84.5% sous le 50ième percentile de Collège I.

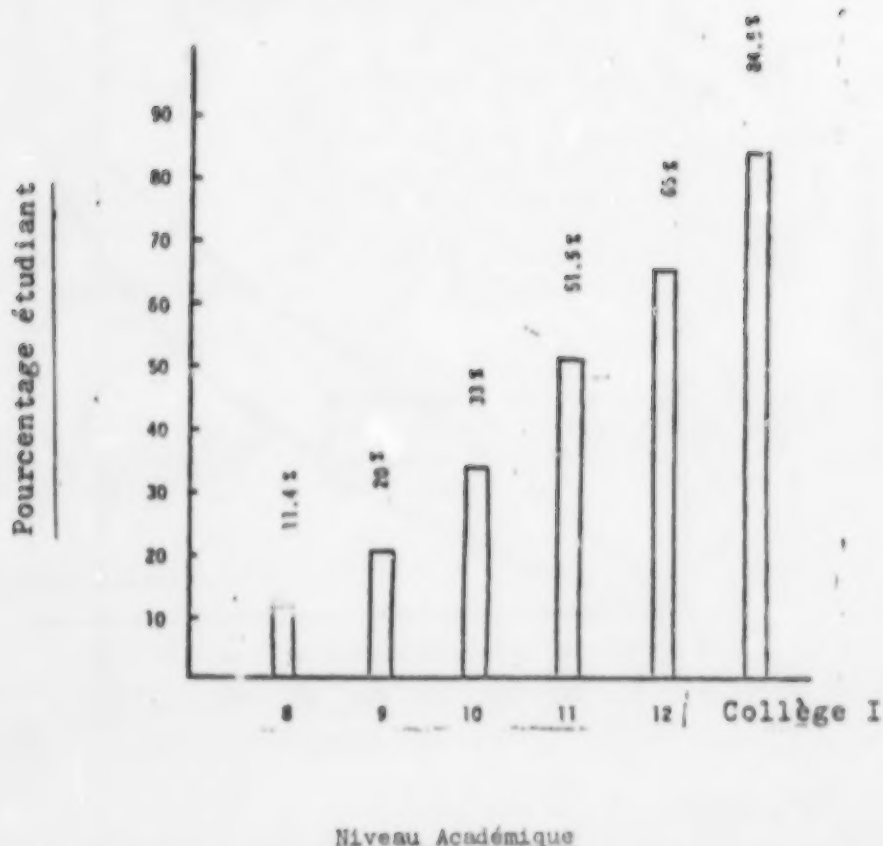


Figure 2. Graphique cumulatif en pourcentage et nombre d'étudiants dont les résultats sont égaux ou inférieurs au 50ième percentile du niveau académique indiqué selon le "DIAGNOSTIC READING TEST".

On a voulu ensuite avoir une vue systématique et objective du niveau des travaux de lecture requis pour bien comprendre le matériel vu en classe, pour solutionner les problèmes, pour rédiger des rapports sur ce matériel. On a donc demandé aux départements d'envoyer une sélection de manuels et de livres de chaque discipline pour évaluation. Les livres d'introduction que les nouveaux devaient utiliser au premier semestre ainsi qu'un échantillon de livres employés dans les semestres suivants ont été choisis comme échantillon valable. Les 85 livres, venant de 16 départements, ont été évalués selon le test SMOG ("SMOG Readability Formula").

Les mesures linguistiques dont la valeur prédictive du niveau de difficulté est la meilleure, sont la longueur du mot et celle de la phrase. Pour le test SMOG, on choisit au hasard 10 phrases consécutives du début, du milieu, et de la fin du volume. On compte alors dans les 30 phrases le nombre de mots polysyllabiques (3 syllabes ou plus et la racine carré de ce nombre est ramenée au plus proche carré parfait. On ajoute alors 3 à la racine carrée pour obtenir le score SMOG. Le score SMOG d'un texte correspond à un niveau académique et indique qu'une personne ayant atteint ce niveau académique devrait saisir la teneur de ce texte. L'erreur standard de prédiction du test SMOG est de 1.5 année. En d'autres mots, dans 68% des cas, cette formule prédit le niveau de convenance d'un volume dans un écart maximum de 1.5 année. Avec les résultats SMOG, un score de 13 à 16 correspond à une éducation collégiale, de 17 à 18, un entraînement de maîtrise, de 19 et plus, à une qualification hautement professionnelle.

Le Tableau 1 montre le niveau de convenance des volumes utilisés à John Abbott College en 1976-77. 60 volumes sur 85 (70.6%) ont un score de 13 ou plus et 47 (55.8%) d'entre eux ont un score de 14 ou plus.

INTERPRETATION

Il est clair qu'un grand nombre d'étudiants n'ont pas des habiletés de lecture suffisantes, et qu'un pourcentage substantiel des volumes qu'ils emploient sont destinés à des lecteurs d'un niveau académique supérieur au leur.

On a considéré que les normes de Collège I étaient une mesure meilleure pour les étudiants du Collège, car les étudiants de Secondaire V de l'échantillon original étaient encore au Secondaire et n'étaient en rien impliqués dans les programmes de Collège I. Le niveau de difficulté des volumes utilisés au Collège est tel qu'on s'attend à ce que les étudiants puissent lire et travailler avec une habileté au moins équivalente à celle de nouveaux collégiens. Il n'est pourtant pas question de suggérer au corps professoral de choisir des livres plus faciles. Le choix de livres pour les programmes de Collège I est limité et de plus les bons livres peuvent être difficiles. De même, les livres employés à l'Université sont sans doute aussi difficiles et c'est peut-être rendre un mauvais service à l'étudiant que de lui donner au niveau Cégep des volumes faciles provoquant ainsi l'illusion chez lui que la même chose devrait exister à l'Université. Une solution finale pourrait être de donner au corps professoral (par des séminaires de développement professionnel) et ainsi aux étudiants, des moyens d'abaisser le niveau de difficulté des textes que les étudiants ne comprennent pas très bien. Etant donné que la complexité du vocabulaire est nettement cause de la difficulté des textes, la solution intermédiaire peut-être des guides d'étude et des exercices de vocabulaire.

TABLEAU I

Niveau de convenance (difficulté) de volumes au Collège John Abbott 1976-77¹

Département	Volume	Auteur	SMOG Score
Biologie	Anatomy & Physiology	Anthony & Kolthoff	15
	Botany	Wilson, Loomis, Steeves	12
	Cell Biology	Avers	16
	Cell Biology, as Molecular Approach	Dyson	14
	Human Anatomy	Ashley	12
	Biology	Curtis	14
Chimie	Introductory Chemistry-Module 3	Jalil & Hoewe	13
	Introductory Chemistry-Module 2	Jalil & Hoewe	13
	Introductory Chemistry-Module 1	Jalil & Hoewe	14
	Chemistry: A Modern Introduction	Brascia	14
Physique	Physics	Genzer & Younger	13
	Study Guide to Accompany Physics		15
	Electricity	Paul, Pierce & Stief	13
	Physics	Tipler	18
	Physics (Study Guide)	Tipler	14
	Energy & the Conservation Laws	Stief	14
	Physics	Beiser	14
	Elementary Physics Ch. 1-13	Weidren & Sells	13
	Ch. 20-28		15
	Fundamentals of Physics Ch. 1-12	Halliday & Resnick	12
	Ch. 22-32		13
Mathématique	Entering Basic	Sack & Meadows	14
	Calculus with Analytical Geometry	Swolowski	15
	Mathematical Preparations for		
	General Physics with Calculus	Davidson & Marion	13
	College Algebra	de Jean	10
Commerce & Administration	Personnel	Strauss et al	12
	Essentials of Managerial Finance	Weston & Brigham	16
	Introduction to Canadian Business	Archer	15
	Fundamental Accounting Principles	First Canadian Edition	12
	Accounting for Management	Garner	15
Histoire, Economique, Sciences politiques	An Introduction to Political Science	Kahn et al	17
	The Russian Revolution	Medlin	14
	Economics	Lipsy, Sparks & Sneiner	14
Géographie	The North American City	Yeates & Garner	16
Psychologie	Understanding Human Behavior	Wrightman et al	13
	Studies in Adolescence	Grinder	16
	The Psychology of Consciousness	Ornstein	15
	Self-Directed Behavior	Watson & Tharp	13
	On the Psychology of Motivation & Contingency Management	Ornstein et al	19
	The developing Child		15
	Fundamentals of Scientific Method	Bee	13
	in Psych		
	The Social Animal	Arnoult	15
		Aronson	14

Techniques de nutrition	Food Service Management	Eshbach	12
	Basic Nutrition in Health & Disease	Howe	12
	Food Executive		12
Sociologie	The Decolonization of Quebec	Milner	15
	The Tyranny of Work	Rinchart	15
	Introduction to Society (Theory)	Dansky	15
	Sociology	Popenoe	15
	Introduction to Sociology		17
Hygiène dentaire	Oral Pathology	Kerr et al	15
	Dimensions of Dental Hygiene	Steele	15
	Pharmacology for the Dental Hygienist	Kutscher et al	17
	Dental Laboratory Technology	Cathey	14
Techniques de la documentation	Introduction to Librarianship	Gates	16
	ALA rules for Filing Catalog Cards	American Library Assoc.	14
	Canadian Office Procedures	Reid	12
Techniques infirmières	Pregnancy & Family Health	Anderson et al	11
	Psychiatric Nursing	Mereness	15
	Pediatric Nursing	Marlow	13
	Textbook of Medical-Surgical Nursing	Brunner	13
	Psychiatric Nursing as a Human Exper	Robinson	15
	Introduction to Patient Care	Kozier & Dugas	13
	Medical-Surgical Nursing	Luckmann & Sorensen	13
	Obstetric Nursing	Conant et al	14
	Administration of Medications	Dore	11
Techniques policières	Code Civil de la Prov. de Québec	Wilson & Lafleur	12
	Procedure & Practice in Canadian Criminal Trials		
	Juvenile Delinquency	Bolton	15
	Canadian Political System	Teale	14
	Environment, Process & Structure		17
	Crime & Society	Sykes	17
	Crime, Correction & Society	Johnson	17
	Adult Crime & Social Policy	Glaser	17
Philosophie	Kant and the Nineteenth Century	Jones	15
Anglais (langue maternelle)	The Catcher in the Rye	Salinger	7
	Billy Budd	Melville	12
	The Great Gatsby	Fitzgerald	10
	Agaguk	Theriault	9
	New Horizons in English	Mellgren - Walker	7
	Wuthering Heights	Bronte	11
	The Diviners	Lawrence	7
	Communications	Fabun	12
	Great Jewish Stories	Bellow	11
	In Our Time	Hemingway	7
	Miss Lonelyhearts	West	8
	A Crash Course in Composition	McMahon	11
	The Epic of Gilgamesh	Sandars	11
	Huckleberry Finn	Twain	8
	Roughing It in the Bush	Moodie	10

Il faut aussi tenir compte de la validité du SMOG ou de toute autre formule analogue. Le SMOG implique deux axiomes: faire le compte des mots polysyllabiques dans un nombre fixe de phrases constitue un indice précis de la difficulté relative des divers volumes; la formule pour convertir le compte des polysyllabes en niveaux de difficulté donne des résultats acceptables. On a fait remarquer que les volumes de science contiennent une grande proportion de mots techniques qui sont polysyllabiques, que plus les étudiants sont familiers avec ces mots, moins ils leur sont difficiles, et que dès lors, les résultats du SMOG, dans ces cas, ne sont pas réalistes. Tout en considérant cette possibilité, on s'est livré dans une rencontre du département de chimie à un exercice qui peut être fort intéressant.

TABLEAU 2

Projet CGIPS: GRILLE CHIMIQUE #1 - Éléments, Noms et Symboles

Nb. de syllabes	Tableau périodique complet n_1 $\bar{x}_1$		Moins les symboles sans liens apparents n_2 $\bar{x}_2$		Symboles communs n_3 $\bar{x}_3$	Symboles peu courants n_4 $\bar{x}_4$	
6	1	10%	1	10%	0 -	1	10%
5	8	30%	8	30%	0 -	7	27%
4	31	50.7%	29	51.5%	3 62%	18	38%
3	43	48.6%	41	48.0%	8 66%	20	37%
2	19	62.5%	16	63.8%	9 62%	-	-
1	3	65.7%	0	-	2 70%	-	-

n = Nombre de symboles choisis.

$\bar{x}$ = Taux de succès des étudiants pour chaque symbole.

$\bar{x}_1$ = Tableau périodique complet.

$\bar{x}_2$ = Tableau complet moins les symboles sans liens apparents avec les éléments correspondants (v.g. Na = sodium)

$\bar{x}_3$ = Symboles communs seulement.

$\bar{x}_4$ = Symboles peu courants seulement.

Dans le tableau 2, on analyse selon le nombre de syllabes impliquées, le taux de réussites d'étudiants soumis à un test de chimie où ils devaient reconnaître le nom d'éléments par leur symbole et vice-versa.

Dans la colonne 2, où on emploie le tableau périodique complet ($\bar{x}_1$), il paraît évident que plus un nom d'élément contient de syllabes, plus il est dur de s'en rappeler. C'est aussi la même chose lorsqu'on enlève les symboles sans liens apparents ("Symboles qui n'utilisent pas la 1ère lettre du nom de l'élément, v.g. - Na = sodium). Même lorsqu'on emploie des symboles communs, des mots comme "gold" (or) et "lead" (plomb) sont plus faciles que "hydrogen" (hydrogène) et "oxygen" (oxygène). Parmi les symboles peu courants, on se souvient moins aisément des plus complexes que des plus simples. Même si cet exercice n'est pas un nec plus ultra, il appuie néanmoins l'idée que la complexité du vocabulaire influence la difficulté d'un texte.

Tant qu'on n'a pas pris conscience du niveau réel de compétence en lecture des étudiants, il est compréhensible d'ignorer que l'on doit agir. Chacun à sa façon s'accommode de la situation. Maintenant que les données objectives deviennent de plus en plus nombreuses, comment prétendre qu'il n'est pas au moins nécessaire de commencer à chercher une solution?

On a dit précédemment, qu'on pouvait enseigner les habiletés impliquées dans la compétence en lecture; le succès de nos étudiants inscrits au programme de recherche en lecture au collégial a démontré qu'il n'est pas trop tard pour commencer même au niveau collégial. Ce programme, cependant, requiert un expert rompu à l'enseignement de l'efficacité en lecture. Ce n'est pas la tâche de l'enseignant habituel d'enseigner ou la lecture ou les moyens d'approche d'un travail de lecture. Cependant, il apparaît que ces habiletés devraient être enseignées au Collège John Abbott. Un membre du corps professoral, s'il était expert, rendrait un double service. D'un côté, des séminaires de perfectionnement professionnel pourraient fournir l'occasion d'une sensibilisation de tous les enseignants aux techniques de lecture efficace, en sorte que les étudiants recevraient de l'aide à l'intérieur de leurs disciplines. D'un autre côté, les étudiants qui ont besoin d'une aide plus importante pourraient améliorer leurs habiletés dans des cours spécifiques et crédités.

Il nous apparaît à la lumière des données précédentes qu'ajouter une telle personne au corps professoral devient une priorité.

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Equipe de Recherche en Lecture
Traduction: Yves Michaud

1. G.H. Mc Laughlin, SMOG Grading - A new Readability Formula, Journal of Reading, V. 12, no. 8, Mai 1969, pp. 639 - 646.

APPENDIX B

INSTRUMENTS USED

IN THIS STUDY

Confluence model - English and French

Lateral Preference - English and French

Attitude towards reading - English and French

Self Concept - French

Study behavior - graphs - English

School satisfaction & distress - English and French

COLLEGE READING RESEARCH
CONFLUENCE MODEL INFORMATION

NAME: _____ STUDENT NUMBER: _____

AGE: _____

SEX: _____

HIGH SCHOOL ATTENDED: _____

PROGRAM (SCIENCE, SOC. SC. ETC.) _____

SIBLINGS (TOTAL NUMBER OF CHILDREN IN FAMILY): _____

BIRTH RANK (SELF), e.g. FIRST BORN, 2nd BORN, etc.: _____

AGE SIBLINGS: _____

Only Child Yes _____ No _____

Twin Yes _____ No _____

Youngest Child Yes _____ No _____

One Parent Family Yes _____ No _____ If yes, since when:

DATE: _____

How many adults living at home? _____

Are you living at home? Yes _____ No _____ If no, since when:

DATE: _____

Language spoken at home: _____

Educational Level last Attained by Mother: Gr.7 / H. Sch. / Univ.Studies / Univ. Deg.
Educational Level last Attained by Father: Gr.7 / H. Sch. / Univ.Studies / Univ. Deg.

Age Mother _____

Age Father _____

The information on this form will be used by the College Reading Research team to advance research in College Reading. No information given will be recorded on any personal record form. Thank you for your cooperation.

RECHERCHE EN LECTURE

Fiche d'information

NOM _____ CODE PERMANENT _____

AGE _____

FICHE NO _____

SEXE _____

SECONDAIRE FAIT A L'ECOLE _____

PROGRAMME SUIVI (Sciences-Sciences sociales-etc.) _____

NOMBRE D'ENFANTS dans la famille _____

RANG à la naissance (1er, 2e, 3e, 4e, etc.) _____

AGES des enfants _____, _____, _____, _____, _____, _____, _____, _____.

ENFANT UNIQUE oui _____ non _____

JUMEAU (JUMELLE) oui _____ non _____

CADET oui _____ non _____

PARENTS à la maison père _____ mère _____, si un seul, depuis quand: _____ année(s)

Combien d'adultes demeurent à la maison _____

Demeurez-vous à la maison familiale oui _____ non _____

si non, depuis combien de mois _____

Langue parlée à la maison _____

Niveau d'éducation de la mère: primaire/secondaire/collégial/univ./degré univ.

Niveau d'éducation du père: primaire/secondaire/collégial/univ./degré univ.

Age de la mère: _____

Age du père: _____

MEASUREMENT OF LATERAL PREFERENCE

Name _____

School _____

Age _____

Sex _____

Eye colour - blue _____ brown _____ green _____ hazel _____ grey _____ black _____

Languages Spoken - 1st language _____ 2nd language _____ 3rd language _____

Co-ordination - Preference Information

Circle the response to each question which describes you best.

1. Most people tend to carry their head with a slight tilt. Do you carry your head tilted to the right or to the left? left _____ right _____ middle _____
2. With which hand do you use an eraser on paper? left _____ right _____ both _____
3. Which eye would you use to peep through a keyhole? left _____ right _____ both _____
4. If you wanted to listen to a conversation going on behind a closed door, which ear would you place next to the door to better hear what was being said? left _____ right _____ both _____
5. With which foot do you kick a ball? left _____ right _____ both _____
6. If you had to look into a dark bottle to see how full it was, which eye would you use? left _____ right _____ both _____
7. Into which ear would you place the earphone of a transistor radio? left _____ right _____ both _____
8. With which hand do you remove the top card when dealing? left _____ right _____ both _____
9. Which eye would you use to sight down a rifle? left _____ right _____ both _____
10. If you had to step onto a chair, which foot would you place on the chair first? (try it if you are not sure) left _____ right _____ both _____
11. With which hand do you throw a ball to hit a target? left _____ right _____ both _____
12. With which hand do you draw? left _____ right _____ both _____

MESURE DE PREFERENCE LATERALE

Nom _____

Ecole _____ Age _____ Sexe _____

Couleur des yeux - Bleus _____ bruns _____ verts ----
noisettes _____ gris _____ noirs _____

Langues - 1^{re} langue _____ 2^e langue _____
3^e langue _____

Préférence de Latéralité

Pour chaque question encerclez la réponse qui vous décrit le mieux.

1. La plupart des gens ont tendance à pencher la tête légèrement
Penchez-vous votre tête à droite ou à gauche?

gauche _____ droite _____ ni l'un ni l'autre _____

2. De quelle main vous servez-vous de la gomme à effacer?

gauche _____ droite _____ les deux _____

3. De quel oeil vous servez-vous pour regarder par un trou
de serrure?

gauche _____ droit _____ les deux _____

4. Si vous vouliez écouter une conversation derrière une porte
fermée, quelle oreille placeriez-vous contre la porte pour
mieux entendre ce qui se dit?

gauche _____ droite _____ les deux _____

5. De quel pied frappez-vous une balle?

gauche _____ droit _____ les deux _____

6. Si vous deviez regarder dans une bouteille foncée pour en
vérifier la quantité du contenu, de quel oeil vous
serviriez-vous?

gauche _____ droit _____ des deux _____

7. Dans quelle oreille placeriez-vous l'écouteur d'un
radio transistor?

gauche _____ droite _____ les deux _____

8. Avec quelle main enlevez-vous la première carte d'un jeu de cartes quand vous servez?

gauche _____ droite _____ les deux _____

9. Quel œil employez-vous pour viser avec un fusil?

gauche _____ droit _____ les deux _____

10. Si vous deviez monter sur une chaise, quel pied placeriez-vous d'abord sur la chaise? (faites-le si vous n'êtes pas sûr)

gauche _____ droit _____ les deux _____

11. De quelle main jetez-vous une balle pour frapper une cible?

gauche _____ droite _____ les deux _____

12. De quelle main dessinez-vous?

gauche _____ droite _____ des deux _____

ESTES (1971) ATTITUDE TO READING SCALE

1. Reading is for learning but not for enjoyment.
2. Money spent on books is well spent.
3. There is nothing to be gained from reading books.
4. Books are a bore.
5. Reading is a good way to spend spare time.
6. Sharing books in class is a waste of time.
7. Reading turns me on.
8. Reading is only for grade grubbers.
9. Books aren't usually good enough to finish.
10. Reading is rewarding to me.
11. Reading becomes boring after about an hour.
12. Most books are too long and dull.
13. Free reading doesn't teach anything.
14. There should be more time for free reading during the school day.
15. There are many books which I hope to read.
16. Books should not be read except for class requirements.
17. Reading is something I can do without.
18. A certain amount of summer vacation should be set aside for reading.
19. Books make good presents.
20. Reading is dull.

-
- A - strongly agree
B - agree
C - undecided
D - disagree
E - strongly disagree

ECHELLE D'ATTITUDE ENVERS LA LECTURE (ESTES 1971)

1. La lecture est pour apprendre et non pour le plaisir.
2. L'argent dépensé pour l'achat de livres est de l'argent bien dépensé.
3. On n'a rien à gagner à lire des livres.
4. Les livres causent l'ennui.
5. Lire est une bonne façon d'employer son temps libre.
6. Se prêter des livres en classe est une perte de temps.
7. La lecture est un passe-temps qui me convient.
8. La lecture n'est bonne que pour ceux qui ne pensent qu'aux notes.
9. Les livres ne sont généralement pas assez bons pour qu'on les finisse.
10. La lecture m'est une source de joie.
11. Je n'ai plus le goût de lire après une heure de lecture.
12. La plupart des livres sont trop longs et ennuyeux.
13. La lecture libre n'enseigne rien.
14. On devrait consacrer plus de temps à la lecture libre durant les heures de classe.
15. Il y a beaucoup de livres que j'espère lire.
16. On ne devrait lire que pour faire ses devoirs.
17. La lecture est une activité dont je peux me passer.
18. On devrait consacrer une certaine partie des vacances d'été à la lecture.
19. Les livres constituent de bons cadeaux.
20. Lire est ennuyeux.

INVENTAIRE DE SOI

Niveau Secondaire

Instructions:

Veillez indiquer le degré de votre accord ou désaccord pour chacune des phrases dans ce livret en faisant un X dans l'un des espaces sur la feuille de réponses.

A = Complètement d'accord

C = Pas d'accord

B = D'accord

D = Complètement pas d'accord

Par exemple:

	A	B	C	D
Je veux être une étoile de cinéma.	()	()	(X)	()
J'aime le gâteau au chocolat.	(X)	()	()	()

Il n'y a ni réponses justes ni réponses fausses, aussi répondez à chaque question aussi honnêtement que vous le pouvez.

N'écrivez pas dans ce livret

Indiquez si vous êtes un garçon ou une fille et écrivez votre âge, votre année au bas de votre feuille de réponses.

Par exemple:

Nom:

Garçon

Age: 12 ans

Année: Sec. I

1. Pour moi, le travail scolaire est bien facile.
2. Je suis satisfait d'être justement ce que je suis.
3. Je devrais m'entendre mieux avec les autres.
4. Ma famille pense que je n'agis pas comme je le devrais.
5. Les gens m'embêtent souvent, sans raison.
6. En général, je ne fais pas ma part du ménage à la maison.
7. Je me sens quelque fois énervé à l'école.
8. Je laisse souvent les autres faire ce qu'ils veulent.
9. J'ai autant d'amis que la plupart des gens.
10. En général personne ne fait beaucoup attention à moi chez nous.
11. Avoir de bonnes notes est important pour moi.
12. On peut me faire confiance autant qu'à n'importe qui d'autre.
13. Les jeunes de mon âge m'aiment bien.
14. Il y a des moments où j'aimerais quitter la maison.
15. J'oublie presque tout ce que j'apprends.
16. Ma famille est étonnée quand je participe à des activités familiales.
17. Je ne suis pas souvent une personne heureuse.
18. Je ne suis pas très souvent solitaire.
19. Ma famille respecte mes idées.
20. Je ne suis pas un très bon élève.
21. Je fais souvent des choses que je regrette plus tard.
22. Les enfants plus vieux ont l'air de m'aimer.
23. Parfois je me conduis mal à la maison.
24. Je me sens souvent découragé à l'école.
25. Souvent je souhaiterais être plus jeune.
26. Je suis habituellement amical envers les autres.
27. Généralement je ne traite pas ma famille aussi bien que je le devrais.
28. Mon professeur me fait sentir que je ne suis pas assez bon.
29. Je suis toujours content de ma façon d'être.
30. On m'aime tout autant que la plupart des autres.
31. Je cause des ennuis à ma famille.
32. Je suis lent à finir mon travail scolaire.
33. Je ne suis pas souvent aussi heureux que j'aimerais l'être.
34. Je ne suis pas aussi beau que la plupart des gens.
35. Je n'ai pas beaucoup d'amis.
36. Avec ma famille je me sens libre de tout questionner.
37. Même quand j'ai quelque chose à dire, souvent je ne le dis pas.
38. Quelquefois je suis parmi les derniers à être choisi pour former une équipe.
39. Je sens que ma famille me fait toujours confiance.
40. Je lis bien.

41. J'ai du mal à me faire des amis.
42. Ma famille me viendrait en aide si j'avais n'importe quel ennui.
43. Je ne réussis pas à l'école aussi bien que je le voudrais.
44. Je trouve qu'il m'est difficile de parler devant la classe.
45. Quelquefois j'ai honte de moi.
46. J'aimerais avoir plus d'amis intimes.
47. Ma famille souvent attend trop de moi.
48. Je ne travaille pas très bien à l'école.
49. Je ne suis pas une si bonne personne que je le voudrais.
50. Parfois on a du mal à devenir mon ami.
51. J'aimerais être quelqu'un d'autre.
52. En général on ne s'amuse pas beaucoup en ma compagnie.
53. Je suis une personne importante pour ma famille.
54. On pense que je suis un bon élève.
55. Je ne suis pas très sûr de moi.
56. Souvent je n'aime pas être avec d'autres enfants.
57. Ma famille et moi nous amusons bien ensemble.
58. Il y a des moments où j'aimerais laisser tomber l'école.
59. Je peux toujours prendre soin de moi.
60. Bien des fois j'aimerais être plutôt avec des enfants plus jeunes que moi.
61. En général ma famille ne fait pas attention à mes sentiments.
62. On ne peut pas me faire confiance.

ECHELLE D'ANGOISSE ET DE SATISFACTION SCOLAIRES

Entrevues où il est question de:

1. _____ manque d'estime de soi vis-à-vis du rendement scolaire.
2. _____ estime de soi vis-à-vis du rendement scolaire.
3. _____ humiliation par le professeur vis-à-vis du rendement scolaire.
4. _____ louange par le professeur vis-à-vis du rendement scolaire.
5. _____ humiliation par les camarades de classe vis-à-vis du rendement scolaire.
6. _____ louange par les camarades de classe vis-à-vis du rendement scolaire.
7. _____ être ignoré par le professeur.
8. _____ être accepté par le professeur.
9. _____ manque de goût ou anxiété (crainte d'échec) au sujet d'examens ou de projets scolaires.
10. _____ sentiment de bonheur ou de confiance accrue au sujet de la réussite scolaire.
11. _____ manque de goût ou ennui à l'école.
12. _____ satisfaction et intérêt dans les activités scolaires.
13. _____ anxiété concernant les projets d'études futures et la réussite financière future.
14. _____ confiance accrue concernant les projets d'études futures et la réussite financière future.
15. _____ ennui durant les cours.
16. _____ intérêt dans les activités de classe.
17. _____ atmosphère oppressive de l'école (l'école est comme une prison).
18. _____ satisfaction d'être à l'école.

19. _____ conflits avec les parents au sujet du rendement scolaire.
20. _____ satisfaction des parents au sujet du rendement scolaire.
21. _____ conflits avec les parents au sujet du temps passé à faire les devoirs.
22. _____ pas de conflit ou de désaccord avec les parents au sujet du temps passé à faire les devoirs.
23. _____ autre raison.

NOM DE L'ETUDIANT _____

DATE DE L'ENTREVUE _____

NOM DE L'ORIENTATEUR _____

Veillez cocher (✓) la raison ou les raisons de l'entrevue avec le client. Passer tous les formulaires au chef de section à la fin de chaque semaine.

APPENDIX C

COURSE OUTLINES

OBJECTIVE:

To enable the students to improve their control over their own development by the application of the principles of learning theory to the self-directed modification of their behaviors, including ocovert behaviors such as thoughts, self-statements, self-instructions, attitudes, beliefs, images, etc.

GOALS:

At the end of the course, the students will:

- 1) understand the principles of learning including operant and classical conditioning of both overt and covert behaviors.
- 2) understand the effect on behavior of altering the antecedent situation and the consequences of it.
- 3) understand the effect of altering cognitive behaviors, especially self-statements and self-instructions.
- 4) be able to apply the above in the design of self-modification programs.
- 5) demonstrate their understanding of the above by designing and executing a self-modification program which will improve their reading/studying behavior.

COURSE REQUIREMENTS AND EVALUATION:

- 1) Write several quizzes designed to test knowledge of the principles of learning (30% of final mark).
- 2) Mini-project. Choose a behavior with which there is some dissatisfaction, design and execute a "mini" self-modification program as a practice exercise. (20% of final mark).
- 3) Maxi-project. Design and execute a major self-modification program aimed at modifying behavior related to reading/studying.
- 4) Where subjects are available, act as contingency manager/tutor for a junior high school student in a reading program.

TEXT:

- 1) Watson and Tharp. Self Directed Behavior: Modification for Personal Adjustment. Brooks/Cole 1972.
- 2) J.A.C. Reading Research Package.

COLLEGE READING RESEARCH

English 603-104
Instructor: Pearl Grubert

Winter Semester 1977
(Psychology 350-901-X)
Instructor: Alex Stirling)

COURSE DESCRIPTION:

This course is designed to help the student improve his general reading ability. This will be accomplished through practise in the various skill areas which constitute the reading process. The overall objective is to make each student a more efficient and effective reader by giving him practice during class time in

- 1) increasing rate of reading, with maintenance or improvement of comprehension in easy-to-read material
- 2) developing more effective study habits which will cause a corresponding improvement in comprehension in content area reading
- 3) increasing vocabulary knowledge for general reading as well as in subject area material.

An essential part of this program will be the CEGEP student's practise and application of the above listed skills in his own academic endeavours. Concurrently, however, the college student will be taught methods for teaching these skills to others, either at the high school level or college. This tutoring will continue for ten weeks during the term, with each session lasting for approximately one hour.

Students enrolled in this programme take two credit courses: English 104 described above and Psychology 901, with instructor Alex Stirling. The English course provides the practical methodology for improving reading and study skills. The psychology course presents information designed to help the student actually apply the techniques so as to change his own behaviour and attitudes towards reading in general, and studying specifically.

MATERIALS:

Most of the books required for this course have been specially prepared by the instructors. They will be supplied to the students for the cost of printing and include the following:

Tricks of the Trade

College Student's Personal Log

Reading Efficiency; Handbook for Tutors; Behaviours Technology

In addition, students are required to buy at the bookstore:

Timed Readings Level 7 - Jamestown Publishers

For each class session, the student is required to bring one easy-to-read book for use in speeded exercises.

EVALUATION:

The student's mark will be based upon his personal improvement in each of the areas being practised in class. Therefore, it is imperative that the student complete each of the activities to the best of his ability. Most of the progress in each of the areas will be recorded in the College Student's Personal Reading Log. This will be handed in for marking purposes by April 29, 1977. The subject area test and vocabulary test will be given in the week of May 2, 1977. The final Diagnostic Reading Test will be given on May 10, and 11, 1977. Failure to sit for this test will result in an Incomplete for the course(s). (See attached sheet).

COURSE EVALUATION:

Attendance: Due to the nature of this particular course with its emphasis upon practical application of various skills, attendance is both necessary and compulsory for those wishing to improve. It is the policy of the College Reading Research Project that any student who misses more than 4 classes throughout the semester (for reasons other than illness) will be automatically issued an EA (failure due to absence).

TUTORING:

Each student will be required to draw up a report following each tutoring session. These 10 reports will then be synthesized into a final report which will be worth 30% of the final mark.

EVALUATION

SECTION I

SPEED AND ACCURACY

Total: 25 marks

- a) Alarm Clock Reading Sheets
- b) Paper Clip Reading Sheet
- c) Timed Reading Graph
- d) Book forms - Number filled out _____

- 1. _____(5)
- 2. _____(5)
- 3. _____(5)
- 4. _____(10)

Your Total _____

SECTION II

VOCABULARY

Total: 15 marks

Your Total _____

SECTION III

SUBJECT AREA TEST

Total: 15 marks

Test _____

SECTION IV

REPORTS

Total: 30 marks

Tutor Report _____

Your Total _____

SECTION V

BONUS POINTS

Total: 15 marks

Your Total _____

TOTAL MARK IN ENGLISH 104 _____

APPENDIX D

LETTERS TO STUDENTS



CEGEP
JOHN ABBOTT
COLLEGE

P.O. Box / C.P. 2000
Ste. Anne de Bellevue, Québec
H9X 3L9
Tel. (514) 457-6610

Dear Student:

This letter is addressed to those students who are ambitious and eager to be successful in their chosen academic careers.

Your reading scores on the Diagnostic Reading Test show that you are not approaching reading tasks as efficiently as you could. Reading is the basic skill required for academic success in every discipline including mathematics and science. It is particularly important in the Social Sciences and in Humanities where the volume of reading makes fast and efficient reading skills almost a necessity.

Research has demonstrated that many intelligent people do not do well in school because they do not read efficiently and because they do not use effective thinking and learning strategies. These skills can be taught.

During the winter semester 60 John Abbott students participated in a program in College Research. The students took 2 credit courses, one in Psychology (350-901-69) and one in English (603-104-75). In the psychology course students were taught the principles of learning and motivation as well as behaviour management. In the English course they studied effective strategies for becoming a more efficient reader. In this program it was hypothesized that one of the best ways to learn is to teach. Therefore, CEGEP students were taught to tutor grade 7 students who had reading problems, and for the last 10 weeks of the semester they practiced what they were learning by teaching the basic skills and strategies of efficient reading to an adolescent in a local high school for one hour each week. Last year's students found this a most effective way to learn. They became so involved in their clients' and their own improvement that the tutoring went on, often in their own homes, in spite of the disruption in the schools.

This year, the provincial government has again supported this research with a substantial grant. As a result 35 returning students are participating in the program during the first semester.

In the second semester there will be 70 places for first year students. Approximately 1,000 first year students took advantage of the opportunity to take the Diagnostic Reading Test. That is an important first step

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178.

2/

on the road to success. Now that you have an objective assessment of your skills, you have the opportunity to do something about improving them.

The program offers:

- 1) Two credit courses as part of your regular program.
 - a) Psychology (350-901-69)
 - b) English (603-104-75)
- 2) An opportunity to practice the skills learned in an interesting field-work experience.
- 3) An opportunity to help someone else while you improve your own academic efficiency.
- 4) The opportunity to increase your potential for future academic success.

If you think you'd like to participate fill out the attached form and put it into the internal mail system by handing it in at the Switchboard in Laird Hall or at Kirkland. If you are selected to participate you will receive instructions on how to register for these courses for next semester. Any questions about this program may be addressed to Geraldine Schwartz 457-6610 (ext. 255) or Alex Stirling 457-6610 (ext.263).

College Reading Research
John Abbott Team

Geraldine Schwartz
Alex Stirling
Pearl Grubert

Dear

Your scores in the Diagnostic Reading Test are:

Speed _____ words per minute
Vocabulary _____ percentile
Comprehension _____ percentile
Total _____ percentile

This means:

_____ 1) that reading is not a problem. Good luck at JAC.

_____ 2) reading maybe part of your problem but this maybe due to English being a second language and this program may not be appropriate. Please arrange for an interview with an Academic Advisor as soon as possible.

_____ 3) Reading seems to be a problem. You are eligible for the program in College Reading Research. If you are interested in participating, fill out the attached application form and hand it in at the switchboard in Laird Hall or Kirkland.

There will be a limited number of spaces available. In the first semester there were four requests for each space. Those people who return their application early will have the best chance at getting a space.

College Reading Research
John Abbott team
Geraldine Schwartz
Alex Stirling
Pearl Grubert

Name _____

Address _____

Telephone No. _____

Student No. _____

Program (e.g. Social Sciences, Police Technology, etc.)

Address the enclosed envelope as follows:

College Reading Research
Dr. Geraldine Schwartz
Laird Hall, Room 200

Hand this in to the switchboard at Laird Hall or Kirkland Campus so
that it may go through the internal mail system.

Remember, the earlier you hand this in the better chance you have at
getting a space in the program.

Note: Champlain letters are included in Appendix C_A

APPENDIX E

SAMPLE LETTERS FROM HIGH SCHOOLS

MACDONALD HIGH SCHOOL

P.O. Box 226
Macdonald College, Qué.
HOA 1C0

Tel: (514) 457-3770

January 3, 1977

Dr. G. Schwartz,
Director, College Reading Research,
John Abbott College,
Ste. Anne de Bellevue, Quebec.

Dear Dr. Schwartz:

I would like to acknowledge receipt of letters from your students who acted as tutors at Macdonald High School during the first semester. Time will not permit me to reply to your students individually. I would be grateful if you would thank them for writing to me to express their feelings about the program.

I believe the standard of writing skills exhibited in the various letters, indicates that your students are making significant progress and improving their communication skills. Certainly I was able to sense feelings of warmth, appreciation and genuine concern for the well being of our students at Macdonald High. To say the least, this is most gratifying to me. I believe that you and your students have good cause to be proud of the work you are doing.

Sincerely,



David H. Hill
Principal

DHH:mn

183.

la commission scolaire LAKESHORE school board

South shore protestant regional school board

centennial regional high school

880 hudson
greenfield park, quebec j4v 1h1
telephone 876-0271

June 11, 1976

Mrs. S. Woodruff,
Champlain Regional College,
900 Riverside Drive,
St. Lambert,
Province of Quebec.

Dear Mrs. Woodruff,

We have received the results of the Champlain Regional College/Centennial Regional High School reading programme and are impressed with the progress made by the students. It would appear that the programme was successful, particularly when one notes the number of books read by our more "reluctant" readers.

Letters have been sent to each of our students involved in the programme. A copy of the letter will go on file. In addition we shall make an effort to include the grade awarded on each of the report cards.

Mr. White and I would like to express our thanks to you and your tutors. The project was well organized and the results indicate that it was a highly worthwhile project.

Yours sincerely,

Barbara Curtis

Barbara Curtis
Vice-Principal
Cycle I

BC/fls

mr. k. lee ms. b. plouffe mr. r. green mr. h. jack mr. r. white
principal vice - principals

APPENDIX F

PAPER PRESENT AT THE
MEETING OF THE INTERNATIONAL
COUNCIL OF PSYCHOLOGISTS

August 25, 1977

SAN FRANCISCO

"PROGRAM TO DEVELOP READING EFFICIENCY
IN HIGH RISK COLLEGE STUDENTS"

Geraldine Schwartz, Ph.D.

to be included after Aug. 30, 1977.

PROGRAM TO DEVELOP READING EFFICIENCY AND ACADEMIC
EFFECTIVENESS IN "HIGH RISK" COLLEGE STUDENTS

Geraldine J. Schwartz, Ph.D.
John Abbott College
Ste Anne de Bellevue
Quebec, Canada

The findings of this research indicated that 84.5% of College Freshmen at an upper middle class CEGEP in Quebec scored below the 50th percentile for college freshmen on the Diagnostic Reading Test. When 90 texts used by sixteen departments at this college were rated by the SMOG readability scale, 68.7% were at grade 13 level or above. This suggests that many of the texts used at the college were well above the level of understanding of a large proportion of the students.

In this paper, a program to improve the reading efficiency of "High Risk" college students is described. Experimental subjects take two one-semester credit courses in psychology and English, where they learn the principles of behavior management and reading efficiency. As well, these students are trained to teach reading, and to act as contingency managers to a reading disabled adolescent. College students tutor for one hour a week, in addition to class time, during the last 10 weeks of a 15 week semester.

The program has a double barrelled effect. High school tutees show substantial improvement on standardized tests after their 10-week individualized reading program. "High Risk" college students are the biggest beneficiaries. On the post test, experimental subjects score significantly better than control groups at the .01 level. As well, they show significant improvement at the .01 level in each of the categories of the Diagnostic Reading Test. These findings suggest that teaching is one of the most efficient ways to learn.

Paper presented at the meeting of the International Council of Psychologists, San Francisco, August 1977.

The author's new address as of September 1, 1977:

Dr. Geraldine Schwartz
Director of Psychology
Children's Hospital
250 W. 59th Street
Vancouver, B.C., Canada

PROGRAM TO DEVELOP READING EFFICIENCY AND ACADEMIC
EFFECTIVENESS IN "HIGH RISK" COLLEGE STUDENTS

INTRODUCTION

During the past 2 years, the literature both in the scholarly journals and in the popular press has indicated that the reading and writing skills of North American students of all ages are poorer than those of previous generations of students. At the same time, the democratic ideal that everyone is entitled to a university education, as well as a lower birthrate and the need to fill existing post secondary educational facilities, have combined to put thousands of less academically competent freshmen at the doors of colleges and universities.

The dilemma of professors across North America is that a large proportion of their students are not able to read the books they assign and, probably consequently, are not able to describe clearly what they have learned in good written prose.

It appeared to those of us concerned about this problem that we either had to rewrite our text books in simpler language in order to lower the level of instruction to that of the students' ability, or we had to find some way of quickly and effectively improving the language skills of our students. Given the number and variety of texts available, we knew the first suggestion would produce insurmountable problems. Therefore, counting on the enormous learning potential of people of all ages, we decided to embark on the latter course.

Since September 1975, a research team, which included 14 researchers by June 1977, working at three colleges and seven high schools, in both English and French, has been involved in the extensive and intensive study, within a tight research framework, of the reading and related academic skills of college students in Quebec. This has provided an enormous bank of hard data as well as some insights on possible solutions

to the problem. I would like to share some of the most important of these findings with you today.

Reading Scores

In August and September 1976, 1709 English speaking students at two English colleges in the Montreal area took the Diagnostic Reading Test. In December, 598 French speaking students at a third college took the same test.

Figure 1 presents the results of 896 entering students at John Abbott College. The John Abbott data will be used as an example. (The results at Champlain College and at Collège de Rosemont were significantly lower.) Figure 1 shows that 20% of the students were reading below the 50th percentile for grade 9, 51.5% had scores below the 50th percentile for grade 11, and 84.5% were below the 50th percentile for college freshmen. (At Champlain, 34.2% fell below the 50th percentile for grade 9, and 85.7% were below the 50th percentile for college freshmen; at Rosemont, 44.6% fell below the 50th percentile for grade 9 and 98% were below the 50th percentile for the college freshman level.)

Readability of College Texts

In order to provide a systematic and objective understanding of the level of reading tasks students were required to perform to successfully understand the material covered in class and to solve problems and write papers based on this material, the researchers rated 90 texts from 16 departments at John Abbott College which were being used in 1976-77. Departments were asked to send their introductory text and a selection of four or five other texts used in subsequent semesters. The SMOG readability formula was used to rate the 90 texts submitted.

Figure 2 shows the percentage and number of books rated at or below the indicated grade level of readability according to the SMOG scale. It should be noted that 62 out of 90, 68.9%, of the texts were rated at grade 13 level or above,

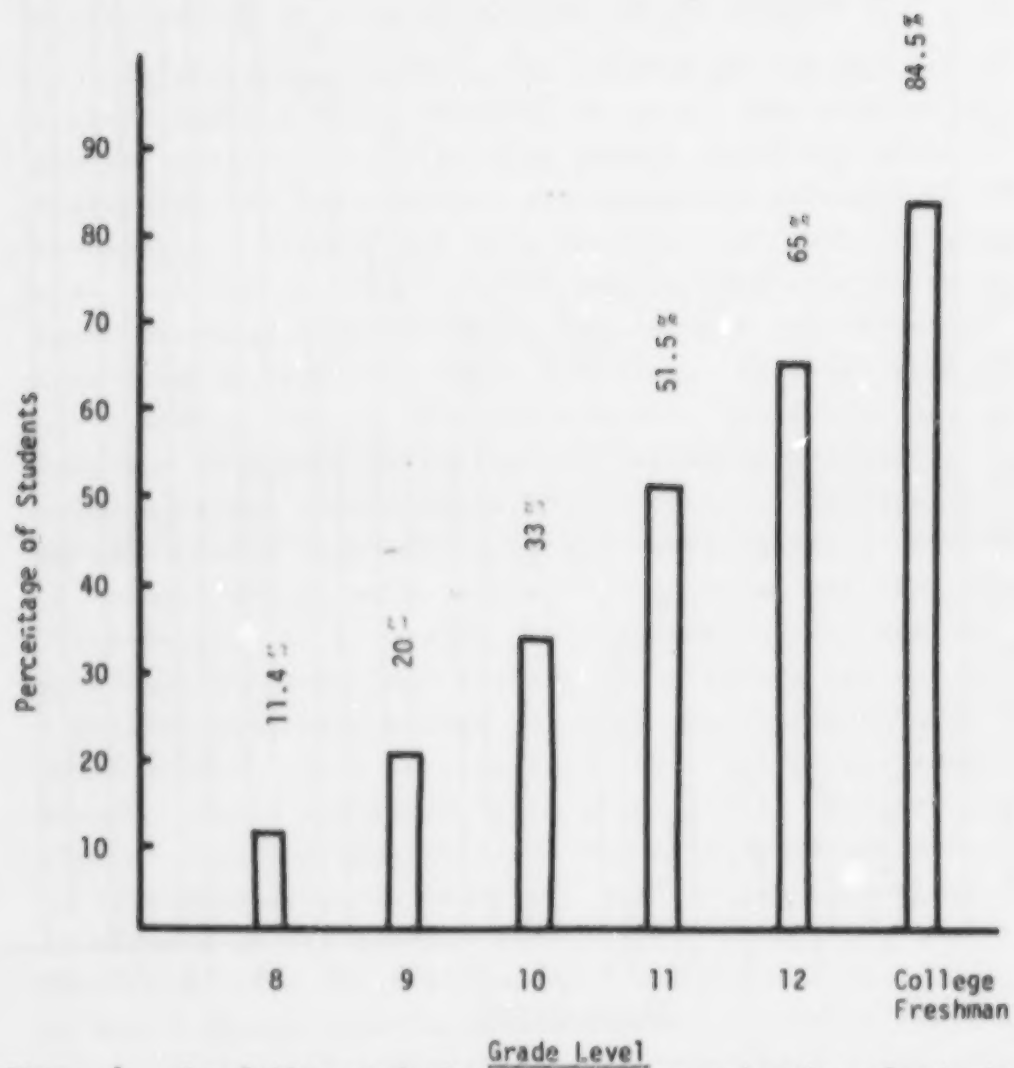


Figure 1. Cumulative graph showing percentage and number of entering students scoring at or below the FIFTIETH percentile of the indicated grade level on the DIAGNOSTIC READING TEST.

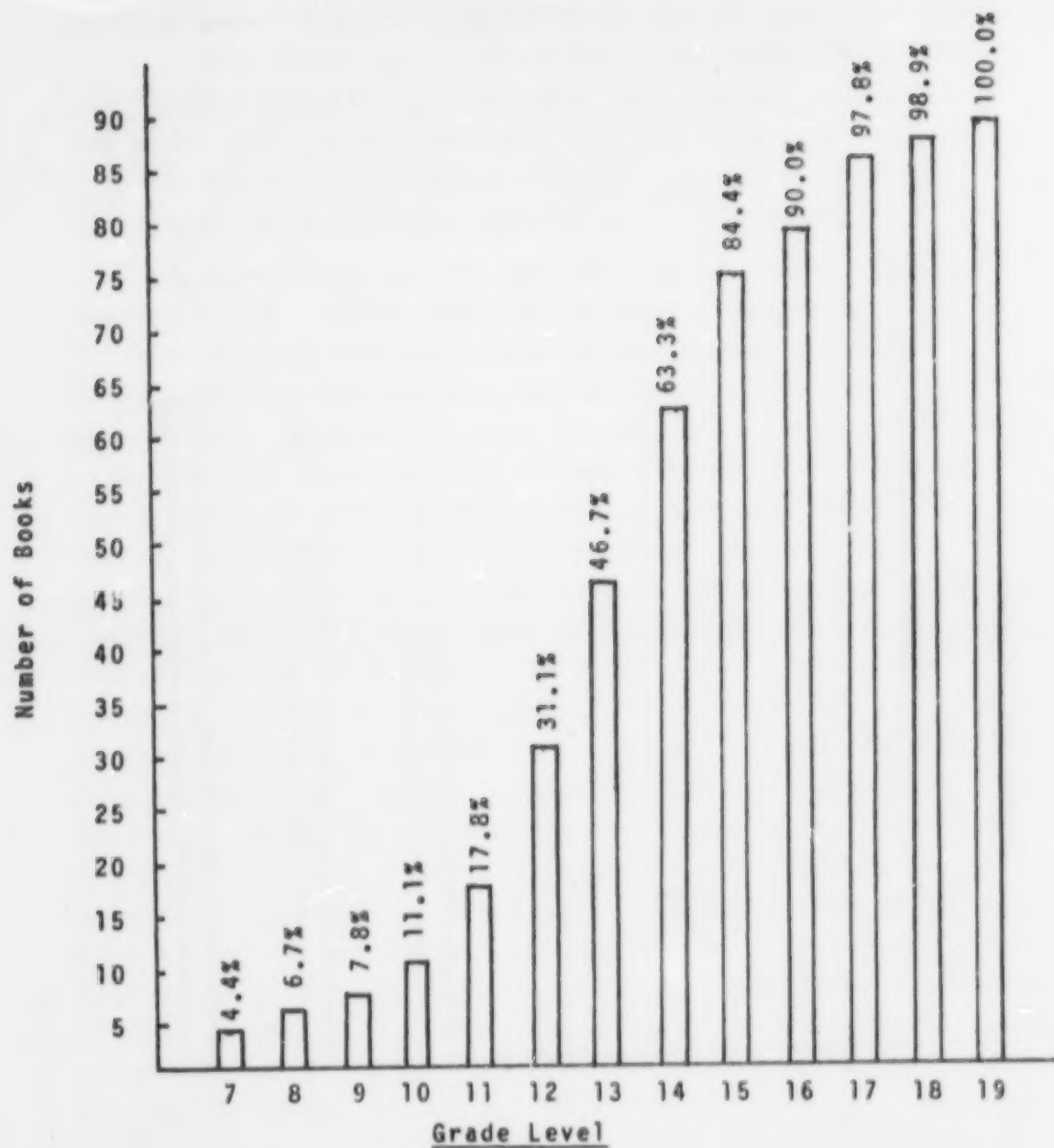


Figure 2. Cumulative graph showing percentage and number of books rated at or below indicated grade level of readability according to the SMOG Scale.

Note. According to the SMOG Scale, a grade of 11-13 indicates the need for a college education 17-18 indicates the need for graduate training 19 and above indicates the need for higher professional qualification.

while Figure 1 showed that 84.5% of the students who were using these texts were reading below the 50th percentile for college freshmen (Grade 13). It is clear that many of the texts used at the college, and therefore the reading tasks based on these texts, are well above the level of understanding of a large portion of the students.

As previously stated, the decline of reading skills appears to be a North American dilemma. The results of current testing indicates that Quebec students, both Anglophone and Francophone, are seriously affected by this phenomenon. Reasons for this decline must certainly be complex, but one important factor may be that curriculum in North American schools during the sixties and seventies tended to de-emphasize skill training. This has been particularly true in the high schools, where teachers of the language arts were encouraged to emphasize creativity, oral expression and appreciation of literature. Curriculum builders hoped that this approach would foster an interest in reading and a taste for good literature, and that skills would develop as a result. Unfortunately, this has not generally occurred, and reading for pleasure has not become a popular pastime, either for high school students or young adults. This is especially true for people whose reading skills are below their grade level. A large proportion of them are non-readers. The most important consequence of this phenomenon is that poor readers get very little practice in reading at any level. In addition, it appears that the strategies with which to approach the reading tasks required by the academic curriculum are lacking. Fifteen years ago, curriculum included specific models for these kinds of tasks. In the more recent past, this procedure was considered overly restrictive. The old method did, however, provide students with at least one model. Bright students could adapt these, and at least all students knew where to begin.

Description of the Program

Theory and Rationale:

The program I'm about to describe was devised to attack the problem of the poor reader on many levels. Particularly, its aim was to provide students with effective strategies for approaching the reading task and with a great deal of practice in reading. The problem from a psychological point of view was to provide a delivery system for these skills that would be highly motivating to the poor reader who had established long term avoidance strategies to reading.

In addition, another phenomenon in the public school system mitigated against the success of poor readers. Students in the public school system in North America have been taught since Kindergarten to be passive participants in the learning process. They are expected to sit in their seats and listen to their teachers. Generally, the procedures involve listening to the teacher and carrying out instructions exactly as specified. They are rewarded by good grades and teacher's approval when they quietly go about the business of following these instructions. After 11 - 12 years of this type of training, they expect to play the role of passive observer to that teaching performance and to memorize the information the teacher implies is important.

The success of this program is dependent on its ability to turn around the passive learning phenomenon. It is based on the premise that active participation in the intellectual process is a vastly superior method in effective learning than is passive participation. The method chosen to do this was to teach students to teach so that they might learn actively.

Actually, this is not a new phenomenon. During the last 300 years and up to about 30 years or so ago, most North Americans were educated in one room schoolhouses where it was common practice for older children to teach younger children.

Everyone learned to teach as a natural part of the learning process. Students who are poor readers often have poor self images of themselves as learners and negative attitudes towards school and the learning process in general. They have strongly established avoidance strategies to reading and studying and often, no matter how much they want to succeed, they are unable to deal with their own avoidance strategies and poor study habits. In order to help these students, the program is based on the art and technology of behavior management.

Description:

Students who volunteer for the program take two one-semester credit courses of 45 hours each: one in psychology (Development of the Person), where they learn -

- The principles of learning
- reinforcement theory
- behavior management
- cognitive development
- emotional development
- motivation theory
- self-management technology

and the other in English (Linguistics and the Reading Process) where they learn -

- strategies for efficient reading

In addition, during the first five weeks of the semester, they are trained to teach reading to junior high school students who have reading disabilities.

During the last 10 weeks of the semester, each college student tutors a high school student for an hour a week in addition to class time. College students are taught to use the theories presented in their psychology course to modify the reading behavior of their clients, with the expressed purpose that they learn to manage their own behavior.

Thus, they are taught to teach the basic strategies for effective reading using modules and protocols written for that purpose. They learn to articulate these strategies to

teach them to others and they are then asked to apply these strategies to reading material at their own level. They use contingency management procedures to monitor a reading program for their clients based on the contract system, and they learn to keep their client on the track using reinforcement theory. Both the client and the tutor get a substantial amount of reading practice as they work on their reading contracts.

During the average 10-week program, the high school student reads an average of 10 books. His tutor is expected to parallel read so that he may be an effective teacher. The college students, who are also on a contract system, read an average of seven additional books at their own level.

The program has a double barreled effect. High school students make significant improvement in reading on standardized tests, but the biggest beneficiaries of the program are the college students.

Results:

Table 10a presents the results of the students at John Abbott College on the Diagnostic Reading Test. (Table 10b presents the results of the students at Champlain Regional College.)

Experimental design:

Students in Group 1-E were the experimental group. These students had the full program. They took the course in psychology, and the course in English. As well, they were given tutoring training and as a fieldwork exercise they taught a junior high school student. Group 2-C took the course in psychology, the tutoring training and tutored a high school student. Group 3-C took the psychology course, which included training in the self-management of study behavior. Group 4-C was the intended control group. However, of the 70 students randomly distributed to this group, only 12 could be cajoled into taking

TABLE 10a
FINAL RESULTS - DIAGNOSTIC READING TEST
JOHN ABBOTT COLLEGE

Group	h	Speed (w.p.m.)		Vocabulary		Rate of Comprehension		Total Score		Reading Efficiency	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1-E	29	249.76	505.14	33.66	42.24	204.91	305.80	61.55	69.41	616.03	1,376.97
2-C	16	267.56	303.81	31.63	38.25	199.42	201.13	59.88	62.50	621.56	797.19
3-C	19	255.11	277.11	32.63	37.95	202.93	199.34	61.05	66.00	608.11	702.69
4-C	12	250.83	322.83	32.91	39.25	176.55	185.15	58.00	63.75	579.50	818.75

Group 1E (Experimental) - psych, Eng. I.T., F.W.
Group 2C (Control) - psych, T.T., F.W.
Group 3C (Control) - psych
Group 4C (Control) - attention placebo

± of 1 = rate of increase

S = significant diff. between pre and post test score * .05 level, ** .01 level, N.S. = no significant difference

NOTE: Group 1 is also significantly different from groups 2, 3, 4 at .01 level overall.

TABLE 102
FINAL RESULTS - DIAGNOSTIC READING TEST
CHAMPLAIN

GROUP	n	Speed (w.p.m.)		Vocabulary		Rate of Comprehension		Total Score		Reading Efficiency	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
5-E	24	243.04	315.00	29.33	39.17	174.31	202.63	55.40	65.18	530.96	800.38
6-E	20	266.60	361.80	27.25	39.25	207.92	208.94	54.50	63.50	565.70	891.60
7-C	28	301.11	294.36	28.79	38.07	213.49	183.40	54.93	62.50	594.57	723.64
8-C	11	259.67	268.67	31.22	44.11	191.90	192.78	50.89	70.68	597.00	731.33

Group 5E (Experimental) - Psych., Eng. T.T., F.W.
Group 6E (Experimental) - Psych., Eng. T.T., F.W.P.
Group 7C (Control) - Eng. T.T., F.W.
Group 8C (Control) - no special treatment
- of 1 = rate of increase
S = Significant differences between pre and post test scores. * = .05 level, ** = .01 level, N.S. = no significant differences.

NOTE: There are no significant differences between groups overall.

the post test; therefore, they were probably those who felt their ability had been underestimated by the first test. (At Champlain, groups 5 and 6 are the experimental groups; group 7 took the English course and tutored; group 8 was the no-treatment control group.)

It should be noted that there were no significant differences in pretest scores between groups. At the post test, group 1 was significantly better than groups 2, 3 and 4 at the .01 level. As well, group 1 shows significant improvement on the post test in each of the categories (none of the control groups show significant improvement in any category except for group 4 in reading efficiency). The improvement in reading efficiency which reflects both the speed and power of the reader is the most interesting score. An improvement of 123% for group 1 compared to 28.26% for group 2, 15.55% for group 3 and 41.29% for group 4 reflects the power of each of the treatment strategies. (The results at Champlain, although of lesser magnitude, were essentially the same.)

The findings of this research show that the combined program which includes teaching the theoretical basis for learning and behavior management technology; the strategies for efficient reading; teaching the students to teach reading, and providing them with the opportunity to apply what they have learned by teaching in a tightly structured field assignment, has a significant beneficial effect on the reading ability of "High Risk" college students. It demonstrates that in a short period of time (15 weeks) even young adults can learn to read efficiently and, when they learn by learning to teach, they perform better than passive learners.

In addition, practice is a key component. Most of the college students read at least 10 books during the duration of the program. Many read 20 or more. Some students reported they read more during this semester than in their entire previous lifetime. The reading contracts at both the high

school level (which required the tutor to parallel read) and the college level motivated this substantial reading activity.

Discussion

This research has demonstrated objectively that the reading skills of college students in Quebec are substantially below North American norms on tests standardized 10 years ago. The literature suggests that this phenomenon is presently occurring throughout North America. In the opinion of the author, this is due to three major deficits:

1. Students are taught to be passive learners by the current generation of educators.
2. Sufficient emphasis is not placed on skills training and in particular, students do not learn models or strategies with which to approach intellectual tasks.
3. Current pedagogical strategies do not produce students who read for pleasure, and thus there is very little practice in reading.

The program described demonstrates that even at the college level increased skill, and motivated practice, produces better readers. The technology of this program is not limited to the two levels chosen for this research. Cross-age and peer tutoring would probably be a valuable technique at any level. The pedagogical philosophy which produces passive learners is in dire need of revision. Teaching students to teach as a regular part of their learning process has the advantage of requiring students to articulate what they have learned and therefore forces them to interact actively with the material. If each student were a teacher, the public schools would have a sufficient number of tutors to teach every student individually.

For the past three centuries, teachers in one-room school houses in North America provided every student with the opportunity to teach. Surely, modern technology can adapt this valuable pedagogical technique to the needs of the late 20th century student.

APPENDIX C_A

CHAMPLAIN REGIONAL COLLEGE

COLLEGE READING RESEARCH



Champlain Regional College

OF GENERAL AND VOCATIONAL EDUCATION

St. Lambert-Longueuil Campus:
800 RIVERSIDE DRIVE,
ST. LAMBERT, QUEBEC,
J4P 3P2
TEL. (514) 672-7380

September 15, 1976

College Reading Research

Dear Student:

Your reading test results are attached to this letter, and they show that reading could be a problem for you. It may be that you are simply inefficient in your reading habits and that you are putting more effort into reading and studying than is necessary.

Research has demonstrated that many intelligent people do not do well in school because they do not read efficiently and because they do not use effective thinking and learning strategies. These skills can be taught.

During the winter semester 60 Champlain students participated in a programme in College Research. The students took 2 credit courses, one in psychology (350-901-69) and one in English (603-104-75). In the psychology course students were taught the principles of learning, and motivation as well as behaviour management. In the English course they studied effective strategies for becoming a more efficient reader. In this programme it was hypothesized that one of the best ways to learn is to teach. Therefore, CEGEP students were taught to tutor grade 7 students who had reading problems, and for the last 10 weeks of the semester they practiced what they were learning by teaching the basic skills and strategies of efficient reading to an adolescent in a local high school for one hour each week. Last year's students found this a most effective way to learn. They became so involved in their client's and their own improvement that the tutoring went on, often in their own homes, in spite of the disruption in the schools.

This year, the provincial government has again supported this research with a substantial grant. This has provided the opportunity for a limited number of students to enrol in the programme in September. There will be places for approximately 90 people to participate in this programme in the winter semester.

The programme offers:

- 1) Two credit courses as part of your regular programme.
 - a) Psychology (350-901-69)
 - b) English (603-104-75)
- 2) An opportunity to practice the skills learned in an interesting fieldwork experience.
- 3) The opportunity to help someone else while you improve your own academic efficiency.



Champlain Regional College

St. Lambert-Longueuil Campus:
800 RIVERSIDE DRIVE,
ST. LAMBERT, QUEBEC,
J4P 3P2
TEL. (514) 672-7360

November 12, 1976

College Reading Research

Dear Student:

Late last August you took a reading test as part of the registration procedure. Results of this test indicate that reading may be a problem for you. It may be that you are simply inefficient in your reading habits and that you are putting more effort into reading and studying than is necessary.

Research has demonstrated that many intelligent people do not do well in school because they do not read efficiently and because they do not use effective thinking and learning strategies. These skills can be taught.

During the winter semester 1976, 60 Champlain students participated in a programme in College Research. The students took 2 credit courses, one in psychology (350-901-69) and one in English (603-104-75). In the psychology course students were taught the principles of learning, and motivation as well as behavior management. In the English course they studied effective strategies for becoming a more efficient reader. In this programme it was hypothesized that one of the best ways to learn is to teach. Therefore CEGEP students were taught to tutor grade 7 students who had reading problems, and for the last 10 weeks of the semester they practiced what they were learning by teaching the basic skills and strategies of efficient reading to an adolescent in a local high school for one hour each week. Last year's students found this a most effective way to learn. They became so involved in their client's and their own improvement that the tutoring went on, often in their own homes, in spite of the disruption in the schools.

This year, the provincial government has again supported this research with a substantial grant. This has provided the opportunity for a limited number of students to enrol in the programme in September. These students are also finding the experience of tutoring a rewarding one for both themselves and their "tutees." We will be offering the programme again in the winter semester.

The programme offers:

- 1) Two credit courses as part of your regular programme.
 - a) Psychology (350-901-69)
 - b) English (603-104-75)
- 2) An opportunity to practice the skills learned in an interesting fieldwork experience.
- 3) The opportunity to help someone else while you improve your own academic efficiency.
- 4) The opportunity to increase your potential for future academic success. Reading is the basic skill required to succeed in any subject area, including - would you believe - math and science.

- 4) The opportunity to increase your potential for future academic success. Reading is the basic skill required to succeed in any subject area, including - would you believe - math and science.

If you think you'd like to participate, fill out the attached registration form. Places will be filled on a first-come first served basis. In addition, students registering in this programme will be in the first group to register in January, to ensure that there are no conflicts and no closed courses for those taking part in the project.

I hope to see you in January!

Sincerely,

Susan Woodruff
Susan Woodruff

lk
att.

If you think you'd like to participate, fill out the attached registration form. Places will be filled on a first-come-first-served basis. Forms should be handed in to Susan Woodruff or Susan Kerwin by November 30, 1976. As registration for students in this programme will be held before regular registration begins, we therefore need to give all names to the Registrar by the first week in December.

We hope to see you in January.

Sincerely,

Susan Woodruff

Susan Woodruff
Susan Kerwin

PLEASE RETURN THIS FORM TO SUSAN WOODRUFF'S OFFICE ROOM E-223 BY NOVEMBER 30, 1976. THANK YOU.

NAME _____

ADDRESS _____

TELEPHONE NO. _____

STUDENT NO. _____

PROGRAMME _____

APPENDIX C_B

CHAMPLAIN REGIONAL COLLEGE

ESTES (1971) ATTITUDE TO READING SCALE

ESTES (1971) ATTITUDE TO READING SCALE

1. Reading is for learning but not for enjoyment.
2. Money spent on books is well spent.
3. There is nothing to be gained from reading books.
4. Books are a bore.
5. Reading is a good way to spend spare time.
6. Sharing books in class is a waste of time.
7. Reading turns me on.
8. Reading is only for grade grubbers.
9. Books aren't usually good enough to finish.
10. Reading is rewarding to me.
11. Reading becomes boring after about an hour.
12. Most books are too long and dull.
13. Free reading doesn't teach anything.
14. There should be more time for free reading during the school day.
15. There are many books which I hope to read.
16. Books should not be read except for class requirements.
17. Reading is something I can do without.
18. A certain amount of summer vacation should be set aside for reading.
19. Books make good presents.
20. Reading is dull.

-
- A - strongly agree
B - agree
C - undecided
D - disagree
E - strongly disagree

Table C_{B.1}

Mean Responses to the Estes Attitude to Reading Scale, pre and post tutoring

Question	Expected Response negative E-5	Response positive A-1	pre Mean	post	level of significance	
1	X		4.30	4.42	ns	
2		X	2.13	1.69	0.01	
3	X		4.65	4.71	ns	
4.	X		3.96	4.25	0.05	
5.		X	2.18	1.69	0.01	
6.	X		3.63	3.81	ns	
7.		X	2.86	2.56	0.05	
8.	X		4.37	4.56	ns	
9.	X		3.93	4.22	0.01	
10.		X	2.07	1.74	0.01	*
11.	X		3.24	3.63	0.05	
12.	X		3.53	4.03	0.01	*
13.	X		4.25	4.33	ns	
14.		X	2.66	2.33	0.05	
15.		X	2.18	1.69	0.01	
16.	X		4.28	4.53	0.05	*
17.	X		4.19	4.33	ns	
18.		X	2.65	2.12	0.01	*
19.		X	2.40	2.00	0.01	
20.	X		3.95	4.46	0.01	*

*denotes a between group difference as well as an across group difference

Questions 10 and 16 show that group 1 is significantly different from group 2. this may be a result of the parallel reading required of the high school tutors and not the peer tutors. As can be seen from Table C_{B.1}, the high school tutors did read a greater number of books than the peer tutors.

Groups 1 was also significantly higher or lower in responses 12, 18 and 20 over both groups 2 and 3.

APPENDIX C_C

CHAMPLAIN REGIONAL COLLEGE

SURVEY OF STUDY HABITS AND ATTITUDES

SSHIA

Survey of Study Habits and Attitudes

Brown—Holtzman

Do not open this booklet until you are told to
do so. Wait for the examiner's instructions.

DO NOT MAKE ANY MARKS IN THIS BOOKLET

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The Psychological Corporation, 304 East 45th Street, New York, N. Y. 10017

Printed in U.S.A.

70-266TB

DIRECTIONS

The purpose of this survey is to furnish an inventory of study habits and attitudes to serve as a foundation for self-improvement. If taken seriously, this inventory can help you obtain a better understanding of how to study properly. If you will honestly and thoughtfully mark all of the statements on the pages that follow, you will be able to learn many of your study faults. The value of this survey to you will be in direct proportion to the care with which you mark each statement. Since your answers will be treated with the strictest confidence, feel free to answer all questions frankly.

You will mark your answers on a separate answer sheet. Make no marks on this booklet. There are 100 statements in this questionnaire. For each statement a five-point scale is provided for indicating whether you rarely, sometimes, frequently, generally, or almost always do or feel as the statement suggests. You are to rate yourself on each statement by marking the space on your answer sheet that represents your answer choice. Thus, for example, you would mark space R on your answer sheet if you *rarely* follow the procedure described or if you feel that the statement is *rarely* true for you. In marking your answers, be sure that the number of the statement agrees with the number on the answer sheet. Make sure that your marks are heavy and black. Make no stray marks on the answer sheet and erase completely any mark that you wish to change.

To aid you in answering this questionnaire, the terms have been defined on a percentage basis as follows:

- R - RARELY means from 0 to 15 per cent of the time.
- S - SOMETIMES means from 16 to 35 per cent of the time.
- F - FREQUENTLY means from 36 to 65 per cent of the time.
- G - GENERALLY means from 66 to 85 per cent of the time.
- A - ALMOST ALWAYS means from 86 to 100 per cent of the time.

Remember, you are asked to rate yourself, not in accordance with what you think you *should* do or feel, or as you think *others* might do or feel, but as you yourself are in the habit of doing and feeling. When you cannot answer a statement on the basis of actual experience, mark the statement according to what you would be most likely to do if the situation should arise.

There are no "right" or "wrong" answers to these statements, and there is no time limit for this questionnaire. Work as rapidly as you can without being careless, and do not spend too much time on any one statement. Please do not omit any of the statements.

R—RARELY

S—SOMETIMES

F—FREQUENTLY

G—GENERALLY

A—ALMOST ALWAYS

1. When my assigned homework is extra long or unusually difficult, I either quit in disgust or study only the easier parts of the lesson.
2. In preparing reports, themes, term papers, etc., I make certain that I clearly understand what is wanted before I begin work.
3. I feel that teachers lack understanding of the needs and interests of students.
4. My dislike for certain teachers causes me to neglect my school work.
5. When I get behind in my school work for some unavoidable reason, I make up back assignments without prompting from the teacher.
6. Difficulty in expressing myself in writing slows me down on reports, themes, examinations, and other work to be turned in.
7. My teachers succeed in making their subjects interesting and meaningful to me.
8. I feel that I would study harder if I were given more freedom to choose courses that I like.
9. Daydreaming about dates, future plans, etc., distracts my attention from my lessons while I am studying.
10. My teachers criticize my written reports as being hastily written or poorly organized.
11. I feel that teachers allow their personal like or dislike for a student to influence their grading unduly.
12. Even though I don't like a subject, I still work hard to make a good grade.
13. Even though an assignment is dull and boring, I stick to it until it is completed.
14. I give special attention to neatness on themes, reports, and other work to be turned in.
15. I believe that the easiest way to get good grades is to agree with everything your teachers say.
16. I lose interest in my studies after the first few days of a new semester.
17. I keep all the notes for each subject together, carefully arranging them in some logical order.
18. I memorize grammatical rules, definitions of technical terms, formulas, etc., without really understanding them.
19. I think that teachers like to exercise their authority too much.
20. I believe that teachers truly want their students to like them.
21. When I am having difficulty with my school work, I try to talk over the trouble with the teacher.
22. I hesitate to ask a teacher for further explanation of an assignment that is not clear to me.
23. I feel that teachers are too rigid and narrow-minded.
24. I feel that students are not given enough freedom in selecting their own topics for themes and reports.
25. I lay aside returned examinations, reports, and homework assignments without bothering to correct errors noted by the instructor.
26. I get nervous and confused when taking an examination and fail to answer questions to the best of my ability.
27. I think that teachers expect students to do too much studying outside of class.
28. Lack of interest in my school work makes it difficult for me to keep my attention focused on assigned reading.
29. I keep my place of study business-like and cleared of unnecessary or distracting items such as pictures, letters, mementos, etc.
30. I have trouble with the mechanics of English composition.
31. When explaining a lesson or answering questions, my teachers use words that I do not understand.
32. Unless I really like a course, I believe in doing only enough to get a passing grade.
33. Telephone calls, people coming in and out of my room, "bull-sessions" with my friends, etc., interfere with my studying.

GO ON TO THE NEXT PAGE.

R—RARELY S—SOMETIMES F—FREQUENTLY G—GENERALLY A—ALMOST ALWAYS

34. In taking notes, I tend to take down material which later turns out to be unimportant.
35. My teachers fail to give sufficient explanation of the materials they are trying to teach.
36. I feel confused and undecided as to what my educational and vocational goals should be.
37. It takes a long time for me to get warmed up to the task of studying.
38. I do poorly on tests because I find it hard to think clearly and plan my work within a short period of time.
39. I feel that teachers are overbearing and conceited in their relations with students.
40. Some of my courses are so uninteresting that I have to "force" myself to do the assignments.
41. I am unable to concentrate well because of periods of restlessness, moodiness, or "having the blues."
42. I skip over the figures, graphs, and tables in a reading assignment.
43. I believe that teachers secretly enjoy giving their students a "hard time."
44. I believe that having a good time and getting one's full share of fun out of life is more important than studying.
45. I put off writing themes, reports, term papers, etc., until the last minute.
46. After reading several pages of an assignment, I am unable to recall what I have just read.
47. I think that teachers tend to talk too much.
48. I believe that teachers tend to avoid discussing present-day issues and events with their classes.
49. When I sit down to study I find myself too tired, bored, or sleepy to study efficiently.
50. I have difficulty in picking out the important points of a reading assignment—points that later appear on examinations.
51. I feel that teachers try to distribute their attention and assistance equally among all their students.
52. I feel that my grades are a fairly accurate reflection of my ability.
53. I waste too much time talking, reading magazines, listening to the radio, watching TV, going to the movies, etc., for the good of my studies.
54. When in doubt about the proper form for a written report, I refer to an approved model to provide a guide to follow.
55. The illustrations, examples, and explanations given by my teachers are too dry and technical.
56. I feel that it is not worth the time, money, and effort that one must spend to get a college education.
57. My studying is done in a random, unplanned manner—is impelled mostly by the demands of approaching classes.
58. When reading a long textbook assignment, I stop periodically and mentally review the main points that have been presented.
59. I feel that teachers tend to be sarcastic towards their poorer students and to ridicule their mistakes excessively.
60. Some of my classes are so boring that I spend the class period drawing pictures, writing letters, or daydreaming instead of listening to the teacher.
61. "Extracurricular activities"—dating, clubs, athletics, fraternity and sorority activities, etc.—cause me to get behind in my school work.
62. I seem to accomplish very little in relation to the amount of time I spend studying.
63. I feel that teachers make their courses too difficult for the average student.
64. I feel that I am taking courses that are of little practical value to me.
65. I utilize the vacant hours between classes for studying so as to reduce the evening's work.
66. I can concentrate on a reading assignment for only a short while before the words become a meaningless jumble.
67. I think that football coaches contribute more to school life than do the teachers.

GO ON TO THE NEXT PAGE.

68. I believe that the sole purpose of education should be to equip students to make a living.
69. Problems outside of school—financial difficulties, being in love, conflict with parents, etc.—cause me to neglect my school work.
70. I copy the diagrams, drawings, tables, and other illustrations that the instructor puts on the blackboard.
71. I feel that teachers think too much about grades and lose sight of the real objectives of education.
72. I strive to develop a sincere interest in every course I take.
73. I complete my homework assignments on time.
74. I lose points on true-false or multiple-choice examinations because I change my original answer only to discover later that I was right the first time.
75. I think that students who ask questions and offer comments in class are only trying to impress the teacher.
76. The prestige of having a college education provides my main motive for going to college.
77. I like to have a radio, record player, or television set turned on while I'm studying.
78. When preparing for an examination, I arrange facts to be learned in some logical order—order of importance, order of presentation in class or textbook, order of time in history, etc.
79. I believe that teachers intentionally schedule tests on the days following important athletic or social activities.
80. I believe that a college's football reputation is just as important as its academic standing.
81. With me, studying is a hit-or-miss proposition depending on the mood I'm in.
82. I am careless of spelling and the mechanics of English composition when answering examination questions.
83. I believe that one way to get good grades is by using flattery on your teachers.
84. I think that it might be best for me to drop out of school and get a job.
85. I study three or more hours per day outside of class.
86. Although I work until the last possible minute, I am unable to finish examinations within the allotted time.
87. I feel that it is almost impossible for the average student to do all of his assigned homework.
88. I feel that the things taught in school do not prepare one to meet adult problems.
89. I keep my assignments up to date by doing my work regularly from day to day.
90. If time is available, I take a few minutes to check over my answers before turning in my examination paper.
91. I feel that the ridiculous assignments made by teachers are the main reason for student cheating.
92. Prolonged reading or study gives me a headache.
93. I prefer to study my lessons alone rather than with others.
94. When tests are returned, I find that my grade has been lowered by careless mistakes.
95. I feel that students cannot be expected to like most teachers.
96. I feel like cutting classes whenever there is something I'd rather do or whenever I need to cram for a test.
97. At the beginning of a study period I organize my work so that I will utilize the time most effectively.
98. During examinations I forget names, dates, formulas, and other details that I really do know.
99. I believe that teachers enter their profession mainly because they enjoy teaching.
100. I believe that grades are based upon a student's ability to memorize facts rather than upon the ability to "think" things through.





DIAGNOSTIC PROFILE FOR SURVEY OF STUDY HABITS AND ATTITUDES

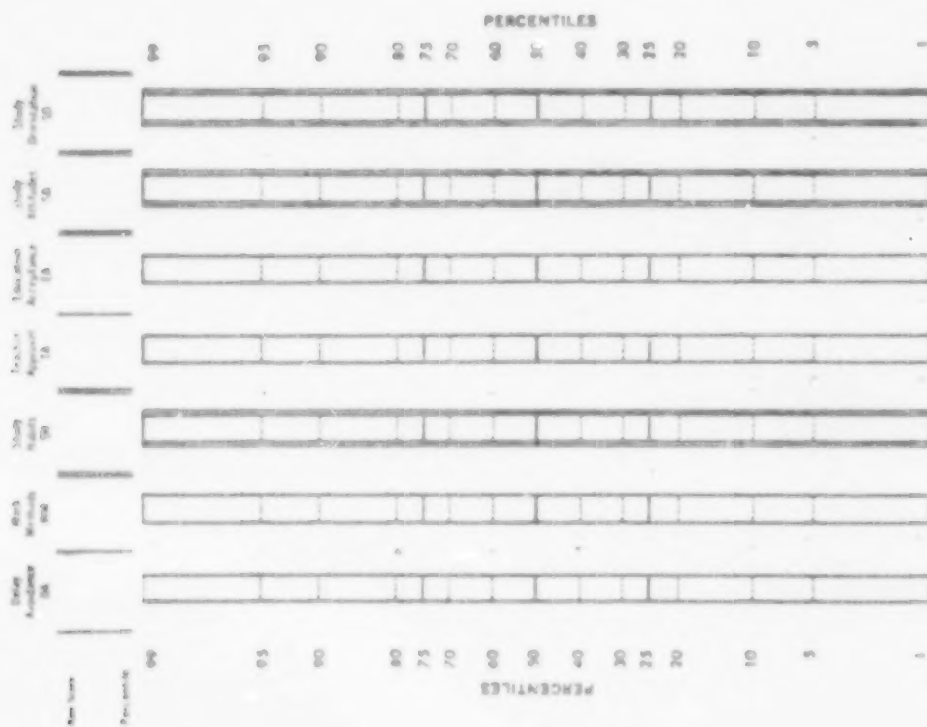
W. F. Brown and W. H. Holtzman

Name _____ Year _____
School _____ Date _____

Age _____ Sex _____ Form of SSIIA _____

Circle Grade or Year in School:

High School: 7 8 9 10 11 12 College: Fr. Soph. Jr. Sr.



Profiling Your SSIIA Scores

In find out how you did on each scale of this survey, look at the numbers in the row marked "Percentile." Your percentile on each scale shows your relative standing in the group of people described on the "Norms Used" line at the bottom of the chart. For example, if your norms group is college freshmen and your percentile on the IA scale is 45, it means that 45 per cent of the freshmen received lower scores than yours on the IA scale, while 55 per cent of them received higher scores. Thus, your percentile tells where you rank in comparison with others in your norms group.

You can complete your profile by making a heavy line across each column at the level which corresponds to your percentile rank on that scale. For example, if your percentile rank on the IA scale is 45, make a heavy line across the IA column halfway between 40 and 50. Draw a line corresponding to your percentile rank for all seven scales.

Then start at the horizontal line you have drawn and black in each column up to or down to the 50th percentile line. Since the 50th percentile line represents the score made by the middle student of your group, the vertical bars above that line on your profile show those scales on which you have scored higher than the middle student and the bars below that line show the scales on which you scored lower.

What Your SSIIA Scores Mean

High scores on SSIIA are characteristic of students who get good grades, have scores tend to be characteristic of those who get low grades or find school work difficult. Therefore, your scores on the SSIIA scales can indicate your strengths and weaknesses in the areas measured by the survey, and also help to predict a future academic achievement.

What the SSIIA Measures

(DA) DELAY AVOIDANCE—your promptness in completing academic assignments, lack of procrastination, and freedom from wasteful delay and distraction.

(WM) WORK METHOD—your use of effective study procedures, efficiency in doing academic assignments, and how-to study skills.

(TA) TEACHER APPROVAL—your opinions of teachers and their classroom behavior and methods.

(EA) EDUCATION ACCEPTANCE—your approval of educational objectives, practices, and requirements.

(SH) STUDY HABITS combines the scores on the DA and WM scales to provide a measure of academic behavior.

(SA) STUDY ATTITUDES combines the scores on the TA and EA scales to provide a measure of scholastic beliefs.

(SD) STUDY ORIENTATION combines the scores on the SH and SA scales to provide an overall measure of study habits and attitudes.

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APPENDIX C_D

CHAMPLAIN REGIONAL COLLEGE

LOCUS OF CONTROL SCALE (ROTTER)

Appendix C_D

CHAMPLAIN REGIONAL COLLEGE
St. Lambert-Longueuil Campus

Psychology
Instructor: Susan Kerwin

LOCUS OF CONTROL SCALE (ROTTER)

1. a) Children get into trouble because their parents punish them too much.
OR
b) The trouble with most children nowadays is that their parents are too easy with them.
2. a) Many of the unhappy things in people's lives are partly due to bad luck.
OR
b) People's misfortunes result from the mistakes they make.
3. a) One of the major reasons why we have wars is because people don't take enough interest in politics.
OR
b) There will always be wars, no matter how hard people try to prevent them.
4. a) In the long run people get the respect they deserve in this world.
OR
b) Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5. a) The idea that teachers are unfair to students is nonsense.
OR
b) Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. a) Without the right breaks one cannot be an effective leader.
OR
b) Capable people who fail to become leaders have not taken advantage of their opportunities.
7. a) No matter how hard you try some people just don't like you.
OR
b) People who can't get others to like them don't understand how to get along with others.

8. a) Heredity plays the major role in determining one's personality.
OR
b) It is one's experiences in life which determine what they're like.
9. a) I have often found that what is going to happen will happen.
OR
b) Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
10. a) In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
OR
b) Many times exam questions tend to be so unrelated to course work that studying is really useless.
11. a) Becoming a success is a matter of hard work, luck has little or nothing to do with it.
OR
b) Getting a good job depends mainly on being in the right place at the right time.
12. a) The average citizen can have an influence in government decisions.
OR
b) This world is run by the few people in power, and there is not much the little guy can do about it.
13. a) When I make plans, I am almost certain that I can make them work.
OR
b) It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14. a) There are certain people who are just no good.
OR
b) There is some good in everybody.
15. a) In my case getting what I want has little or nothing to do with luck.
OR
b) Many times we might just as well decide what to do by flipping a coin.

16. a) Who gets to be the boss often depends on who was lucky enough to be in the right place first.

OR

- b) Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.

17. a) As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.

OR

- b) By taking an active part in political and social affairs the people can control world events.

18. a) Most people don't realize the extent to which their lives are controlled by accidental happenings.

OR

- b) There really is no such thing as "luck."

19. a) One should always be willing to admit mistakes.

OR

- b) It is usually best to cover up one's mistakes.

20. a) It is hard to know whether or not a person really likes you.

OR

- b) How many friends you have depends upon how nice a person you are.

21. a) In the long run the bad things that happen to us are balanced by the good ones.

OR

- b) Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22. a) With enough effort we can wipe out political corruption.

OR

- b) It is difficult for people to have much control over the things politicians do in office.

23. a) Sometimes I can't understand how teachers arrive at the grades they give.

OR

- b) There is a direct connection between how hard I study and the grades I get.

24. a) A good leader expects people to decide for themselves what they should do.

OR

- b) A good leader makes it clear to everybody what their jobs are.

25. a) Many times I feel that I have little influence over the things that happen to me.

OR

- b) It is impossible for me to believe that chance or luck plays an important role in my life.

26. a) People are lonely because they don't try to be friendly.

OR

- b) There's not much use in trying too hard to please people, if they like you, they like you.

27. a) There is too much emphasis on athletics in high school.

OR

- b) Team sports are an excellent way to build character.

28. a) What happens to me is my own doing.

OR

- b) Sometimes I feel that I don't have enough control over the direction my life is taking.

29. a) Most of the time I can't understand why politicians behave the way they do.

OR

- b) In the long run the people are responsible for bad government on a national as well as on a local level.

APPENDIX C_E

CHAMPLAIN REGIONAL COLLEGE

TUTOR'S WEEKLY REPORT

PEER TUTORING REPORT

CONTRACT FOR SUBJECT AREA

WEEKLY CONTRACT FORM

TUTOR'S WEEKLY REPORT

SESSION _____ DATE _____ TIME SPENT _____

TARGET BEHAVIOURS

PREVIOUS SESSIONS SPENT ON THESE BEHAVIOURS

1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

BASELINES

1. _____
2. _____
3. _____
4. _____

PLAN

MATERIALS

GENERAL PLAN FOR NEXT SESSION

COMMENTS

PEER TUTORING REPORT (Summary)

TUTOR'S NAME _____

TUTEE'S NAME _____

NUMBER OF SESSIONS _____

SUBJECT AREA _____

TARGET BEHAVIOURS:

SESSIONS PRACTISED

1.

2. .

3.

4.

5.

SUMMARY OF WEEKLY REPORTS:

1. MATERIALS USED:

2. GENERAL LESSON PLANS:

3. SUMMARY OF ACHIEVEMENTS:

4. RECOMMENDATIONS FOR FUTURE ACTION:

5. COMMENTS:

OBJECTIVES:

Rate each one of the following statements according to your assessment of how well you feel that the objective has been met. (5, completely;4-1 partially).

1. To individualize a study programme in a specific subject area for the student being being tutored so that basic study skills could be improved.

5 4 3 2 1

2. To provide structured sessions to implement the reading and study skills in a specific context.

5 4 3 2 1

3. To provide the impetus for unstructure study time so that the student could engage in effective study behaviour or reading activities voluntarily.

5 4 3 2 1

4. To motivate the student to achieve his goals through the use of a study contract.

5 4 3 2 1

5. To break down avoidance strategies to reading and practising study skills through the use of contingency management procedures.

5 4 3 2 1

6. To provide assistance, motivation and support to the students through the use of a tutor, so that all the above objectives could be met.

5 4 3 2 1

ADDITIONAL COMMENTS AND SUGGESTIONS:

CONTRACT FOR SUBJECT AREA (Tutee)

TUTEE _____

TUTOR _____

SUBJECT AREA _____

I UNDERSTAND THAT THE BENEFIT THAT I DERIVE FROM THIS TUTORING PROGRAMME WILL DEPEND UPON THE EFFORT THAT I PUT INTO IT. I, THEREFORE, UNDERTAKE TO SPEND

_____ HOURS PER WEEK IN THE TUTORING SESSION AND

_____ HOURS PER WEEK DOING EXTRA WORK IN MY AREA.

AMONG THE THINGS WHICH I SHALL DO ARE:

- 1) WORK ON IMPROVING MY VOCABULARY IN THE SUBJECT AREA.
- 2) FOLLOW THE STUDY APPROACH SHOWN TO ME BY MY TUTOR, IN THIS AND ALL MY OTHER SUBJECTS.
- 3) ORGANIZE MY TIME EFFECTIVELY SO THAT I COMPLETE ALL MY ASSIGNMENTS.

POSSIBLE REWARDS FOR DOING THE ABOVE FROM WHICH I CAN CHOOSE ARE:

REGULAR REWARDS:

LONG TERM REWARDS:

I UNDERSTAND THAT THE ABOVE WILL ONLY BE AWARDED ONCE I HAVE COMPLETED THE REQUIRED TASKS OR BEHAVIOURS.

TUTEE SIGNATURE _____

TUTOR SIGNATURE _____

DATE _____

/agd

WEEKLY CONTRACT FORM (TUTEE)

DATE: _____

THIS WEEK I WILL SPEND _____ HOURS WORKING ON _____
(SUBJECT AREA)

THE ACTIVITIES IN WHICH I SHALL ENGAGE ARE THE FOLLOWING:

1. _____
2. _____
3. _____
4. _____

MY REWARD FOR DOING THE ABOVE IS:

TUTEE'S SIGNATURE _____

TUTOR'S SIGNATURE _____

APPENDIX C
F

CHAMPLAIN REGIONAL COLLEGE

QUESTIONNAIRE ON TUTORING

CRITERIA FOR PEER TUTORING INTERVIEW

CHAMPLAIN REGIONAL COLLEGE
St. Lambert-Longueuil CampusQUESTIONNAIRE ON TUTORING

Please answer all questions on the answer sheet.

SECTION I: TUTOR TRAINING

At the beginning of this semester, you received 9 hours of tutor training in Psychology (Contingency Management), and 6 hours of tutor training in English. Please answer the following questions in this section, based on this training.

1. Do you feel that the tutor training in English and Psychology adequately prepared you for your experience in tutoring another student?
(a) yes _____ (b) no _____
2. Did you feel that the tutor training (9 hours of Psychology, 6 hours of English) was
(a) not long enough _____ (b) just right _____ (c) too long _____
3. Did you feel that the 9 hours of tutor training in Psychology was
(a) not long enough _____ (b) just right _____ (c) too long _____
4. Did you feel that the 6 hours of tutor training in English was
(a) not long enough _____ (b) just right _____ (c) too long _____
5. Did you feel that the tutor training in Psychology was
(a) irrelevant and not at all helpful in tutoring another student _____.
(b) moderately relevant and helpful _____.
(c) very relevant and helpful _____.
(c) very relevant and helpful _____.
6. Did you feel that the tutor training in English was
(a) irrelevant and not at all helpful in tutoring another student _____.
(b) moderately relevant and helpful _____.
(c) very relevant and helpful _____.
(c) very relevant and helpful _____.
7. What specific aspects of the tutor training in Psychology (Contingency Management section) could be improved in order to benefit future tutors?
8. What specific aspects of the tutor training in English could be improved in order to benefit future tutors?

SECTION II

9. Were you satisfied with the progress made by your tutee?
(a) yes _____ (b) no _____
10. Were you comfortable in the working relationship with your tutee?
(a) yes _____ (b) no _____
11. In general, was the attitude of your tutee regarding this experience
(a) generally positive _____ (b) no reaction _____ (c) generally negative _____
12. In general, was your attitude towards tutoring another student
(a) generally positive _____ (b) no reaction _____ (c) generally negative _____
13. In tutoring, were you able to motivate your tutee to the extent that you wished?
(a) yes _____ (b) no _____
14. If you answered "no" to the question above, was this due to
(a) a lack of "know-how" on your part _____
(b) a lack of interest on your part _____
(c) a lack of interest on the tutee's part, making for a difficult working relationship _____
(d) other (specify) _____
15. If you experienced problems with your tutee, did you seek help and advice from
(a) project supervisors at Champlain _____
(b) project supervisors in the high school _____
(c) did not seek help even though there were problems _____
16. If you answered "did not seek help" to the question above, explain why.
17. Did you feel that your knowledge of the specific subject area in which you were working was greater than that of your tutee's?
(a) yes _____ (b) no _____
18. Was this
(a) an advantage _____ OR (b) a disadvantage _____
19. Were you able to reach the goal you planned to reach with your tutee?
(a) yes _____ (b) no _____ (c) had no set goal _____

20. In general, did you derive personal satisfaction from this tutoring experience, or did you largely feel that it was a waste of time?
- (a) satisfied _____ (b) waste of time _____
21. As a result of your tutoring, do you feel that your tutee's concept of himself as a learner has improved?
- (a) yes _____ (b) no _____ (c) no change _____
22. Do you feel that by tutoring someone else in this subject area, your own knowledge of this area improved?
- (a) yes _____ (b) no _____
23. Do you feel that the idea "by teaching, one learns" could describe your personal experience with tutoring?
- (a) yes _____ (b) no _____
24. If you answered "no" to the question above was this because
- (a) you felt inadequately trained and inadequately prepared and did not know how to go about planning and conducting tutoring sessions _____.
- (b) you did not bother to put in the necessary time and energy to do a good job _____.
- (c) you can't see how the idea "to teach is to learn" could make any sense _____.
- (d) other (specify) _____.
25. Did you feel that you had sufficient materials to work with during the tutoring sessions?
- (a) yes _____ (b) no _____
26. If you answered "no" to the above question, specify the specific area in which there was a lack.
27. Do you feel that the amount of time that you invested in this tutoring (preparing, traveling, tutoring) was
- (a) not much time at all _____ (b) O.K. _____ (c) much too long _____
28. How many hours per week did you invest in this tutoring project?
- (a) preparation _____
- (b) traveling _____
- (c) tutoring _____

29. Did you feel that the amount of paper work involved in this project was
(a) not enough _____ (b) O.K. _____ (c) too much _____
30. Do you feel that weekly structured forms are necessary for tutors to fill out (i.e. lesson plans and tutoring reports)?
(a) yes _____ (b) no _____
31. How might this required paper work be improved for future tutors?
32. What 3 specific advantages did you gain from this experience?
33. What 3 specific disadvantages did you experience?
34. If you had to suggest 3 major revisions of this tutoring program to be worked on immediately, what would you suggest?
35. Knowing all that you now know about this project, do you think it was worthwhile doing?
(a) yes _____ (b) no _____
36. Would you still do the English course?
(a) yes _____ (b) no _____
37. Would you still do the Psychology course?
(a) yes _____ (b) no _____
38. Would you still become involved in a tutoring experience?
(a) yes _____ (b) no _____
39. Would you recommend this project to your friends?
(a) yes _____ (b) no _____
40. If no, why not?

FOR PEER TUTORS:

41. Do you think you might have preferred working with a high school student?
(a) yes _____ (b) no _____
42. Explain your answer.

FOR HIGH SCHOOL TUTORS:

43. Do you think you might have preferred to tutor a peer?
(a) yes _____ (b) no _____
44. Explain your answer.
45. Did you make use of the reference people at the high school?
(a) yes _____ (b) no _____
46. Were they helpful?
(a) yes _____ (b) no _____
47. Did you feel that the contracts that the high school students signed during the matching meeting
(a) were useless and confusing for the student _____.
(b) had no effect on the student's performance _____.
(c) were helpful and necessary for the student _____.
48. How might these initial contracts be improved?
49. Was the "point system" an effective device in encouraging the high school student to read?
(a) yes _____ (b) no _____
50. Please feel free to add any additional comments.

ANSWER SHEET

STUDENT'S NAME _____

GROUP _____

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

8. _____

9. _____
10. _____
11. _____
12. _____
13. _____
14. _____

15. _____
16. _____

17. _____

18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____

25. _____
26. _____

27. _____
28. _____

29. _____
30. _____
31. _____

32. _____

33. _____

NAME _____

- 8 -

34. _____

35. _____

36. _____

37. _____

38. _____

39. _____

40. _____

41. _____

42. _____

43. _____

44. _____

45. _____

46. _____

47. _____

48. _____

49. _____

50. _____

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CHAMPLAIN REGIONAL COLLEGE
St. Lambert-Longueuil Campus

CRITERIA FOR PEER TUTORING INTERVIEW

Each pair (tutor/tutee) will meet with an instructor in an attempt to establish

- a) whether or not peer tutoring has been a valuable experience for you, and
- b) if so, how might it be improved for future tutors.

Please arrange to meet with your partner to discuss and elaborate on the following questions before the interview. For each question, the tutor and the tutee will be asked for their opinion.

1. Was this peer tutoring a valuable experience for you?

- (a) tutor response
- (b) tutee's response

Explain your answer.

2. What specific advantages did you gain from this experience?

- (a) tutor
- (b) tutee

3. What specific disadvantages did this experience entail?

- (a) tutor
- (b) tutee

4. Do you feel that you were well matched as a pair?

5. Do you feel that this experience has improved your knowledge of the specific subject area?

6. For #5, which factor (a) being a tutor or (b) being tutored was more important in improving your knowledge?

7. Were you able to complete your 10 hours as a pair?

8. How would you feel about peer tutoring based on the "learning all idea" - i.e. each pair of students reads the material beforehand, prepares a list of questions to ask his tutee in class, corrects and elaborates on any mistakes the tutee has made...then the second student would question the first in a similar manner.

Do you think that such a system would benefit students in handling the material in Psychology?

9. Do you think that peer tutoring should be continued in the future?
How might it be improved?
10. Would you recommend this experience to your friends?

APPENDIX C_G

CHAMPLAIN REGIONAL COLLEGE

PERCENTAGE OF RESPONSES

Appendix C_G

Percentage of Responses by Group to the 'Questionnaire on Tutoring' Champlain Regional College, May, 1977

Number of Students: Group 1 - 24, Group 2 - 21, Group 3 - 27.

Do you feel that the tutor training in English and Psychology adequately prepared you for your experience in tutoring another student?

	Yes	No
Group 1	96%	4%
Group 2	90%	10%
Group 3	93%	7%

Did you feel that the tutor training (9 hours of Psychology, 6 hours of English) was

	a) not long enough _____	b) just right _____	c) too long _____
	A	B	C
Group 1	41%	58%	-
Group 2	10%	90%	-
Group 3	51%	49%	-

Did you feel that the 9 hours of tutor training in Psychology was

	a) not long enough _____	b) just right _____	c) too long _____
	A	B	C
Group 1	-	96%	-
Group 2	-	90%	10%
Group 3	14%	74%	11%

Did you feel that the 6 hours of tutor training in English was

	a) not long enough _____	b) just right _____	c) too long _____
	A	B	C
Group 1	37%	63%	-
Group 2	35%	60%	5%
Group 3	63%	37%	-

Did you feel that the tutor training in Psychology was

- a) irrelevant and not at all helpful in tutoring another student ____.
- b) moderately relevant and helpful ____.
- c) very relevant and helpful ____.

	A	B	C
Group 1	-	45%	55%
Group 2	-	45%	40%
Group 3	-	48%	52%

Did you feel that the tutor training in English was

- a) irrelevant and not at all helpful in tutoring another student ____.
- b) moderately relevant and helpful ____.
- c) very relevant and helpful ____.

	A	B	C
Group 1	-	25%	71%
Group 2	5%	30%	65%
Group 3	-	26%	74%

Were you satisfied with the progress by your tutee?

	Yes	No
Group 1	88%	12%
Group 2	100%	-
Group 3	81%	19%

Were you comfortable in the working relationship with your tutee?

	Yes	No
Group 1	88%	12%
Group 2	100%	-
Group 3	96%	4%

In general, was the attitude of your tutee regarding this experience

- a) generally positive ____
- b) no reaction ____
- c) generally negative ____

	A	B	C
Group 1	79%	21%	1%
Group 2	75%	21%	4%
Group 3	81%	19%	-

In general, was your attitude towards tutoring another student

a) generally positive b) no reaction _____ c) generally negative _____

	A	B	C
Group 1	96%	4%	-
Group 2	80%	18%	2%
Group 3	85%	14%	1%

In tutoring, were you able to motivate your tutee to the extent that you wished?

	Yes	No
Group 1	69%	31%
Group 2	83%	16%
Group 3	70%	30%

Did you feel that your knowledge of the specific subject area in which you were working was greater than that of your tutee's?

	Yes	No
Group 1	100%	-
Group 2	45%	50%
Group 3	100%	-

Was this

a) an advantage _____ OR b) a disadvantage _____

	A	B
Group 1	100%	-
Group 2	72%	27%
Group 3	100%	

Were you able to reach the goal you planned to reach with your tutee?

a) yes b) no c) had no set goal

	A	B	C
Group 1	48%	8%	40%
Group 2	75%	-	25%
Group 3	43%	15%	22%

In general, did you derive personal satisfaction from this tutoring experience, or did you largely feel that it was a waste of time?

	a) satisfied ____	b) waste of time ____
	A	B
Group 1	100%	-
Group 2	80%	20%
Group 3	100%	-

As a result of your tutoring, do you feel that your tutee's concept of himself as a learner has improved?

	a) yes	b) no	c) no change
			A B C
Group 1			88% 12%
Group 2			85% 5% 1%
Group 3			84% 15% 1%

Do you feel that by tutoring someone else in this subject area, your own knowledge of this area improved?

	Yes	No
Group 1	92%	8%
Group 2	94%	5%
Group 3	96%	4%

Do you feel that the idea "by teaching, one learns" could describe your personal experience with tutoring?

	Yes	No
Group 1	87%	12%
Group 2	89%	10%
Group 3	96%	4%

Did you feel that you had sufficient materials to work with during the tutoring sessions?

	Yes	No
Group 1	87%	12%
Group 2	95%	5%
Group 3	97%	3%

Do you feel that the amount of time that you invested in this tutoring (preparing, traveling, tutoring) was

a) not much time at all ____ b) O.K. ____ c) much too long ____

	A	B	C
Group 1	17%	73%	7%
Group 2	10%	85%	5%
Group 3	2%	62%	14%

Did you feel that the amount of paper work involved in this project was

a) not enough ____ b) O.K. ____ c) too much ____

	A	B	C
Group 1	-	50%	50%
Group 2	-	36%	63%
Group 3	4%	59%	37%

Do you feel that weekly structured forms are necessary for tutors to fill out (i.e. lesson plans and tutoring reports)?

	Yes	No
Group 1	65%	34%
Group 2	66%	33%
Group 3	55%	44%

Knowing all that you now know about this project, do you think it was worthwhile doing?

	Yes	No
Group 1	100%	-
Group 2	90%	10%
Group 3	100%	

Would you still do the English course?

	Yes	No
Group 1	95%	5%
Group 2	85%	15%
Group 3	84%	10%

Would you still do the Psychology course?

	Yes	No
Group 1	100%	-
Group 2	80%	20%

Would you still become involved in a tutoring experience?

	Yes	No
Group 1	84%	16%
Group 2	89%	10%
Group 3	84%	10%

Would you recommend this project to your friends?

	Yes	No
Group 1	100%	-
Group 2	90%	10%
Group 3	87%	10%

FOR HIGH SCHOOL TUTORS

Do you think you might have preferred to tutor a peer?

	Yes	No
Group 1	25%	75%
Group 2	-	-
Group 3	9%	90%

Did you make use of the reference people at the high school?

	Yes	No
Group 1	41%	58%
Group 2	-	-
Group 3	45%	54%

Were they helpful?

	Yes	No
Group 1	90%	9%
Group 2	-	-
Group 3	62%	37%

Did you feel that the contracts that the high school students signed during the matching meeting

- a) were useless and confusing for the student ____.
- b) had no effect on the student's performance ____.
- c) were helpful and necessary for the student ____.

	A	B	C
Group 1	4%	33%	62%
Group 2	-	-	-
Group 3	-	25%	75%

Was the "point system" an effective device in encouraging the high school student to read?

	Yes	No
Group 1	87%	12%
Group 2	-	-
Group 3	87%	12%

APPENDIX R_A

COLLEGE DE ROSEMONT

EN ANNEXE

En annexe ont été ajoutés les documents suivants:

1. Les mesures concernant la réalisation des divers objectifs. (Echelle de 1 à 5).
2. Les réactions verbales à l'égard de la lecture.
3. Les mesures avant et après traitement concernant les comportements cibles. (Echelle de 1 à 5).
4. Apprentissage de la maîtrise du comportement comme travail de session.
5. Tableau général des résultats moyens selon l'avant et l'après en perception mécanique et en quelques dimensions d'intelligence générale.
6. Tableau d'analyse au T-test effectué sur les résultats avant et après traitement du test de perception mécanique selon les parties du test (5 sections) et selon les résultats combinés et globaux.
7. Le plan du cours de français 601-111.
8. Le plan général du cours de psychologie 350-901 et du travail d'apprentissage en auto-maîtrise du comportement.
9. La lettre d'inscription au testing, la fiche générale d'information, la lettre de résultat individuel au test de lecture, la lettre d'information sur le traitement correctif expérimental et la lettre formule d'application au programme d'amélioration.
10. Copie d'une lettre significative d'un tuteur envoyée aux parents de son pupille.

OBJECTIFS

	5 (901)		6 (901-211)	
	TUT	N-T	TUT	N-T
1	4.0	4.0	3.8	4.0
2	4.0	3.0	3.2	4.0
3	4.2	4.3	4.2	4.8
4	4.4	4.6	4.0	4.2
5	4.4	3.6	3.8	3.4
6	4.0	3.6	4.2	4.2
7	3.8	4.3	4.0	4.4
8	4.8	3.0	3.75	2.0
TOTAL	33.6	30.4	30.95	31.0
MOYENNE	4.2	3.8	3.86	3.88

MOYENNE TUTEURS : 4.03

NON-TUTEURS : 3.84

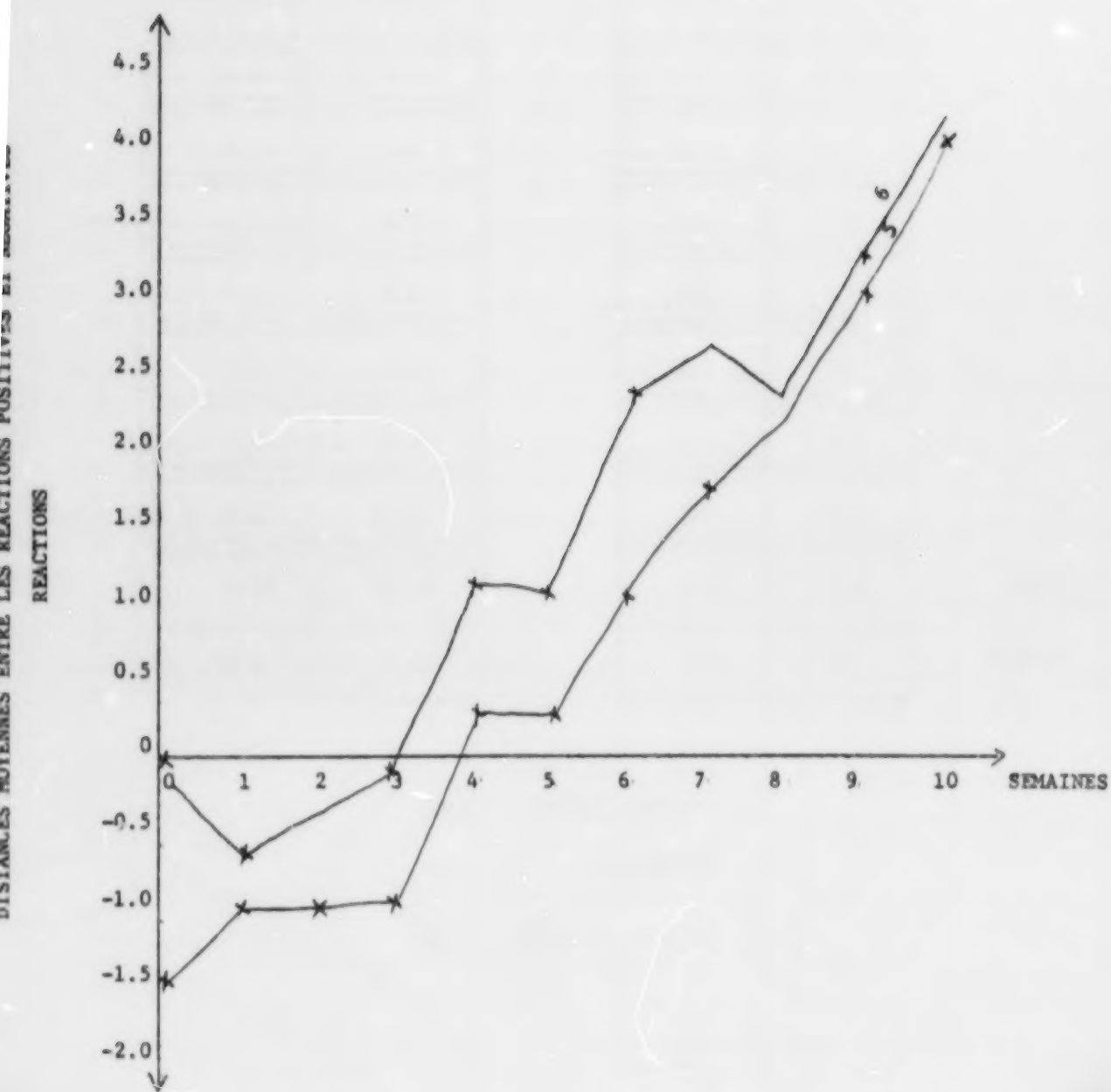
MOYENNE GENERALE: 3.935

REACTION VERBALES A L'EGARD DE LA LECTURE

LEGENDE

GROUPE 5 (901) : _____

GROUPE 6 (901-211) : _____



		5 (901)		6 (901-211)		7 (211)	
		tut	u.t	tut	u.t	tut	u.t
4	A	2.6	2.0	2.4	2.9	2.0	2.0
	P	3.8	3.5	4.8	4.2	3.2	3.0
5	A	3.6	2.3	2.8	2.7	2.2	2.0
	P	4.2	3.0	3.8	4.2	3.0	3.0
6	A	3.0	3.0	2.6	2.4	2.0	2.0
	P	2.8	3.5	3.6	4.2	3.2	3.4
7	A	3.0	3.0	2.8	2.4	1.7	2.0
	P	3.8	3.5	3.6	4.0	3.2	3.4
8	A	2.6	2.3	3.0	3.0	2.5	2.0
	P	3.4	3.5	4.5	4.5	3.5	3.0
9	A	5.0	2.3	1.2	1.7	1.7	2.1
	P	3.8	4.5	4.4	4.4	3.7	3.9
10	A	3.8	2.0	2.0	2.4	3.7	2.3
	P	3.6	3.0	4.0	4.0	4.0	3.8
11	A	3.6	1.7	2.0	2.5	2.0	2.1
	P	4.2	4.0	4.0	4.0	4.2	4.0
12	A	3.6	1.3	1.6	2.0	2.2	1.8
	P	4.0	3.0	3.8	4.1	4.0	3.9

5

6

7

	tut	N-t	tut	N-t	tut	N-t
AVANT	30.8	19.9	20.4	22.0	20.0	18.3
TOTAL						
APRÈS	34.6	31.5	36.5	37.6	30.0	31.4

AVANT	3.42	2.22	2.26	2.66	2.22	2.03
MOYENNE						
APRÈS	3.84	3.50	4.05	4.17	3.33	3.49

TUTEURS

TOTAL: 23.7
AVANTMOYENNE: 2.63
AVANTTOTAL: 33.7
APRÈSMOYENNE: 3.74
APRÈS

NON-TUTEURS

TOTAL: 20.1
AVANTMOYENNE: 2.30
AVANTTOTAL: 33.5
APRÈSMOYENNE: 3.68
APRÈS

MOYENNE GÉNÉRALE

AVANT: 2.465

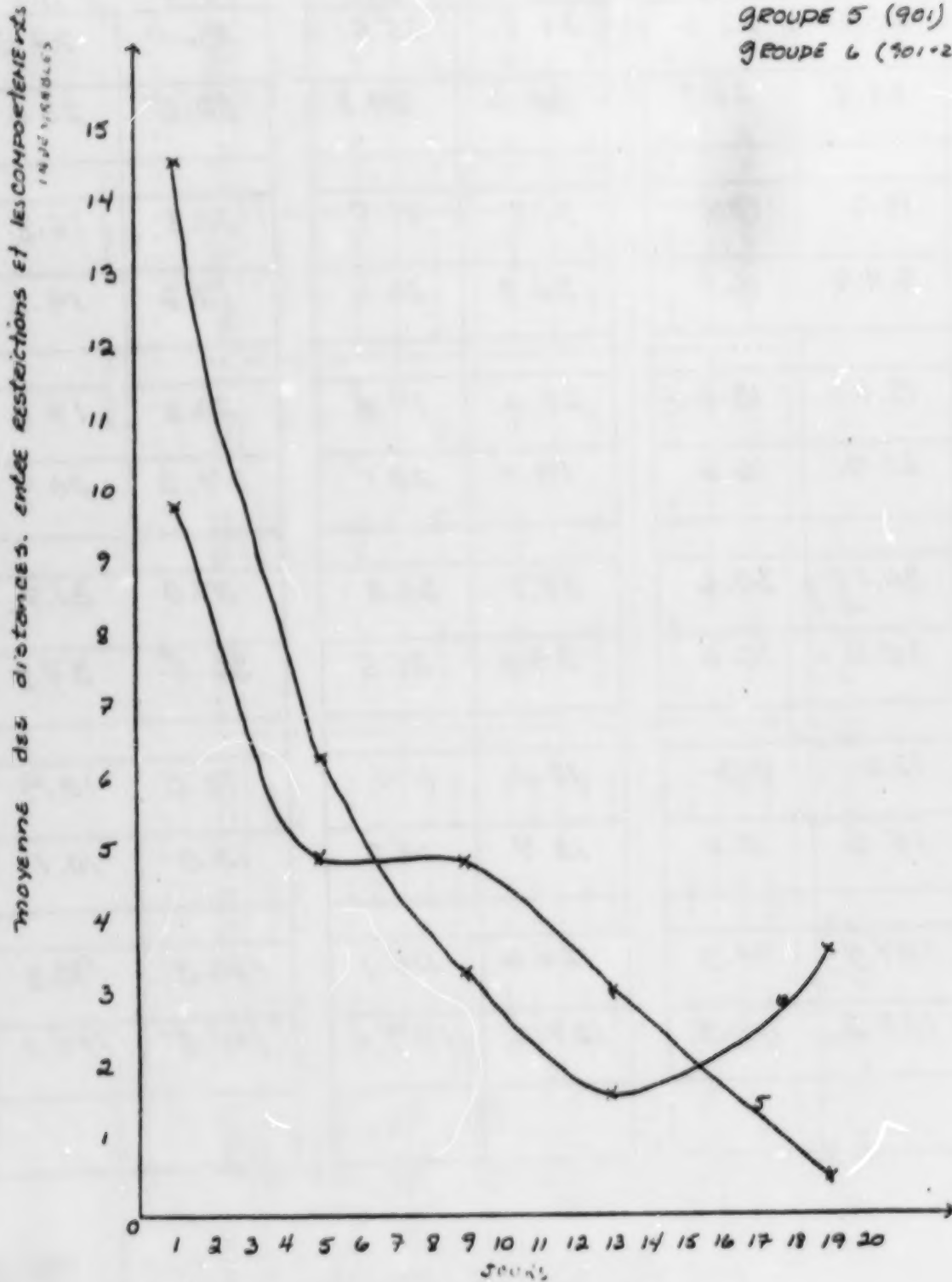
APRÈS: 3.710

MAÎTRISE DU COMPORTEMENT.

LÉGENDE.

GRUPE 5 (901) : —

GRUPE 6 (901+211) : —



distance : intervalles s'écoulant de fois.

ROSEMONT.

COD. 45.		5		6		7	
PERCEPTION TECHNIQUE		(901)		(901+211)		(211)	
		TUT	N-T	TUT	N-T	TUT	N-T
ARITH. 1 (SEC. 1)	PRÉ	24.8	23.6	27.8	25.5	26.0	22.5
	POST	27.8	27.3	30.6	29.8	22.5	23.6
PERCEPTION 1. (SEC. 2)	PRÉ	18.2	13.0	21.8	21.7	20.3	16.3
	POST	24.8	16.0	26.2	26.1	18.2	19.2
SIMILITUDE (SEC. 3)	PRÉ	18.0	13.6	23.2	19.4	20.3	17.1
	POST	21.2	16.6	19.4	22.4	27.2	20.9
PERCEPTION 2. (SEC. 4)	PRÉ	30.1	30.6	38.8	36.0	37.0	31.7
	POST	35.4	36.0	39.0	35.5	36.5	37.8
ARITH. 2 (SEC. 5)	PRÉ	12.0	11.3	13.0	11.4	12.0	10.9
	POST	15.2	15.6	12.4	14.2	10.0	10.1
TOTAL	PRÉ	104.4	94.3	124.6	114.1	116.3	90.3
	POST	123.2	100.3	127.6	129.0	114.5	114.8

REFERENCE EX PERCEPTION
FILE NAME (LOCATION DATE = 06/10/77)

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	(DIFFERENCE) MEAN	STANDARD ERROR	CORR. 2-TAIL PROB.	T VALUE	DEGREES OF FREEDOM
V1	ARITH 1 PRE	24.1739	4.133	0.609	-2.0000	0.720	0.501 0.000	-2.78	45
	46								
R1	ARITH 1 POST	26.1739	5.347	0.796					
V2	PERC PRE	18.1946	7.007	1.033	-2.0652	0.530	0.596 0.000	-3.30	45
	46	21.2609	7.031	1.037					
R2	PERC POST								
V3	SIMIL-PRE	12.3281	5.922	0.873	-2.1087	0.511	0.538 0.000	-3.41	45
	46	21.4348	6.824	1.006					
R3	SIMILITUD POST								
V4	PERC 2 PRE	33.4348	6.546	0.965	-4.0435	1.022	0.377 0.010	-3.96	45
	46	37.4783	5.834	0.868					
R4	PERCEP POST								
V5	ARITH 2 PRE	11.4783	2.438	0.359	-6.8913	0.421	0.461 0.001	-2.12	45
	46	12.3696	2.984	0.440					
R5	ARITH 2 POST								
V6	TOTAL PRE	105.6522	12.367	2.708	-12.7609	2.118	0.651 0.000	-6.50	45
	46	115.4130	15.404	2.271					
R6	TOTAL POST								
T1		57.9783	5.435	1.362	-0.0000	1.134	0.652 0.000	-5.29	45
	46	59.9783	8.983	1.324					
P1									

$T_1 = V_1 + V_3 + V_5$
 $T_2 = V_2 + V_4 + V_6$
 $P_1 = R_1 + R_3 + R_5$
 $P_2 = R_2 + R_4 + R_6$

COLLEGE
DE
ROSEMONT

PLAN DE COURS

département: Français
cours: Lecture (601-211)
session: hiver 1977
préparé par: Thérèse Belzile
bureau: A-428-3

INTRODUCTION

Ce cours a pour but d'améliorer la compétence de l'étudiant en lecture. Pour arriver à réaliser cet objectif, il faudra que l'étudiant effectue plusieurs exercices au niveau des différentes techniques essentielles pour faire une bonne lecture. L'objectif général consiste donc à rendre chaque étudiant bon lecteur en lui faisant faire des exercices pour améliorer:

1. la vitesse et la compréhension en lecture
2. la méthode d'étude et de travail
3. le vocabulaire

Ce cours est inscrit dans un programme de recherche sur la compétence en lecture. Une partie de ce programme consiste à permettre à quelques étudiants de transmettre les connaissances acquises à des étudiants du secondaire I afin d'améliorer la compétence en lecture de ces derniers. Les étudiants choisis deviennent tuteurs et rencontrent leurs pupilles une heure par semaine pendant dix semaines.

Les étudiants qui suivent parallèlement le cours de psychologie 901 recevront au cours des premières semaines une formation qui leur permettra d'être de bons tuteurs. Le cours de français leur fournira les techniques spécifiques à la lecture.

Les étudiants qui ne sont pas inscrits au cours de psychologie recevront quand même la formation de tuteur au cours des premières semaines.

COMPETENCE EN LECTURE

Parmi les aptitudes à acquérir, on retrouve:

1. rapidité à lire (vitesse de lecture)
 - lecture-trombone
 - lecture-réveille-matin
 2. vocabulaire
 - exercices: les préfixes, les suffixes
les racines et leur sens
les mots dans leur contexte
 3. compréhension
 - exercices: trouver l'idée principale
comprendre la structure d'un passage
retenir les détails
trouver le but de l'auteur
remarquer l'enchaînement
prévoir les événements
 4. techniques d'étude
 - au cours du semestre, on présentera à l'étudiant différentes méthodes de travail et on lui demandera de mettre ces techniques en pratique.
- Exemples: -comment parcourir rapidement un texte pour en avoir une idée générale
-comment trouver rapidement une réponse à une question précise
-comment prendre des notes de lecture
-comment faire un travail de recherche
5. solutions aux problèmes du tuteur
 - aussitôt que les rencontres tuteur-pupille seront commencées, on consacrerà une demi-heure par semaine à la discussion des problèmes généraux et spécifiques au tutorat.

EVALUATION

Les résultats de l'étudiant seront basés sur son progrès personnel au niveau de chacun des champs d'étude pratiqués en classe. La présence au cours est donc essentielle et sera contrôlée.

L'étudiant aura en main son "journal de bord" qui lui permettra d'enregistrer toutes ses activités au cours de la session.

De plus, l'étudiant devra compléter un rapport qui devrait être le résumé de ses dix rencontres tuteur-pupille.

Chaque fois que l'étudiant aura complété la lecture d'un livre, au cours du présent semestre, il remplira une fiche de lecture semblable à celle-ci:

NOM DE L'ETUDIANT _____

AUTEUR: nom _____ prénom _____

TITRE DU LIVRE: _____

NIVEAU D'INTERET _____

NOMBRE DE PAGES: _____ niveau de difficulté _____

BREF RESUME DU CONTENU _____

n.b. niveau d'intérêt: situer le livre dans une échelle comme:

1. excellent, recommandé; 2. très bon; 3. bon;
4. passable; 5. médiocre, impossible de lire au complet. 262.

EVALUATION

PREMIERE PARTIE

Vitesse et compréhension

total: 25 points

- a) feuilles de lecture-réveil-matin
 b) feuilles de lecture-trombone
 c) graphiques sur le temps de lecture
 d) fiches de lecture-nombre _____

1. _____ (5)
 2. _____ (5)
 3. _____ (5)
 4. _____ (10)

Votre total _____

DEUXIEME PARTIE

Vocabulaire

total: 15 points

Contrôle

1. _____ (10)

Autre

2. _____ (5)

Votre total _____

TROISIEME PARTIE

Compréhension

total: 15 points

Contrôle

1. _____

Autre

2. _____

Votre total _____

QUATRIEME PARTIE

Rapports

total: 30 points

Rapport du tuteur

1. _____

Votre total _____

CINQUIEME PARTIE

Points boni

total: 15 points

Votre total _____

GRAND TOTAL

263.

LE DEVELOPPEMENT PERSONNEL et l'HABILETE en LECTURE

PLAN GENERAL

1. Valeurs impliquées dans la recherche et le cours.
Description du programme.
 2. Les principes de l'apprentissage.
 3. Le renforcement.
 4. La maîtrise de la contingence.
 5. Les approximations successives.
 6. Les stratégies d'évitement et le renforcement positif (façonnement).
 7. Le contrat et les CIBLES.
 8. Le diagnostic et le rapport du tuteur.
 9. L'auto-gestion. Les motivations cachées du comportement.
-

AUTO - MAITRISE DU COMPORTEMENT

PROJECT D'EVALUATION : TRAVAIL DE SESSION

DEFINITION DU PROBLEMS	_____
ANALYSE DE RENFORCEMENTS	_____
PROCESSUS D'ENREGISTREMENT (DOSSIER)	_____
ANALYSE DE LA SITUATION ANTECEDENTS	_____
COLLECTION DES DONNEES (POINTS DE DEPART)	_____
MODELE DE PROGRAMME	_____
contrôle de la situation antécédents	
utilisation des renforcements	
Façonnement du comportement-cible	
DISCUSSION ET ANALYSE DU PROGRAMME	_____
GRAPHIQUES	_____
CONNAISSANCE GENERALE DES CONCEPTS PSYCHOLGIQUES	_____
TOTAL	_____



Collège de Rosemont

COLLÈGE D'ENSEIGNEMENT GÉNÉRAL ET PROFESSIONNEL DE ROSEMONT

Le lundi 1er novembre 1976

A TOUS LES ÉTUDIANTS DE FRANÇAIS 601-111

Salut,

Grâce à une subvention accordée par le Ministère de l'Éducation, le Cégep de Rosemont a pu mettre sur pied cette année un programme de Recherches sur les habiletés à lire et l'état des connaissances de la langue française chez les cégépiens arrivant en 1re année. Les responsables du projet expérimental au Collège sont Thérèse Belzile et Yves Michaud. La recherche porte sur un diagnostic collectif et individuel, puis sur l'expérimentation d'une méthode efficace de correction traitée selon quatre degrés d'intensité.

Avec l'appui de la Direction pédagogique du Collège, et du département de français, il est apparu que le lien le plus propice à l'analyse diagnostique était les différents cours de français 601-111.

Nous vous demandons d'accepter volontiers de passer les différents tests que nous vous présenterons dans les prochaines trois heures, dans un climat détendu mais sérieux.

Il est entendu que les résultats à ces tests sont confidentiels et ne seront pas utilisés pour fins de classification ou sélection par la Direction du Collège. Les résultats individuels pourront être communiqués à celui qui viendra les demander. Un certain nombre d'entre vous, les plus faibles en lecture, seront invités à participer à un programme intensif de correction qui sera entrepris à l'intérieur de deux cours crédités durant la 2e session.

Les résultats collectifs par groupe seront communiqués à vos professeurs de français qui le désirent, ainsi que les résultats individuels si vous êtes d'accord, en ce qui concerne les résultats aux tests de français.

Avec l'espoir que vous rendrez facile notre tâche en y participant avec bonne volonté, nous vous remercions à l'avance de votre bienveillante attention à cette recherche.

Bien à vous,

Yves Michaud

Thérèse Belzile

266.

YM/TB/ee

RECHERCHE EN LECTURE

Fiche d'information

NOM _____ CODE PERMANENT _____
 AGE _____ FICHE NO _____
 SEXE _____
 SECONDAIRE FAIT A L'ECOLE _____
 PROGRAMME SUIVI (Sciences-Sciences sociales-etc.) _____
 NOMBRE D'ENFANTS dans la famille _____
 RANG à la naissance (1er, 2e, 3e, 4e, etc.) _____
 AGES des enfants _____, _____, _____, _____, _____, _____, _____, _____
 ENFANT UNIQUE oui _____ non _____
 JUMEAU (JUMELLE) oui _____ non _____
 CADET oui _____ non _____
 PARENTS à la maison père _____ mère _____, si un seul, depuis quand: _____ année(s)
 Combien d'adultes demeurent à la maison _____
 Demeurez-vous à la maison familiale oui _____ non _____
 si non, depuis combien de mois _____
 Langue parlée à la maison _____
 Niveau d'éducation de la mère: primaire/secondaire/collégial/univ./degré univ.
 Niveau d'éducation du père: primaire/secondaire/collégial/univ./degré univ.

 Age de la mère: _____
 Age du père: _____



Collège de Rosemont

COLLÈGE D'ENSEIGNEMENT GÉNÉRAL ET PROFESSIONNEL DE ROSEMONT

cher(e) ami(e),

ton résultat au Test Diagnostique de Lecture se lit comme suit:

Vitesse	_____	mots à la minute.
Vocabulaire	_____	percentile.
Compréhension	_____	percentile.
Total	_____	percentile.

Interprétation générale.

- _____ 1) ton habileté en lecture est suffisante et ne constitue pas un problème. Bonne chance à Rosemont.
- _____ 2) il se peut que la lecture soit pour toi un problème, mais c'est dû moins à tes manques d'habiletés en lecture qu'à d'autres facteurs comme langue seconde, etc.
- _____ 3) la lecture semble un réel problème pour toi. Tu es éligible pour participer au programme d'amélioration des habiletés de lecture dans le cadre du projet actuel. Si tu désires t'améliorer, tu n'as qu'à remplir la formule d'application ci-jointe.

Il y aura un nombre limité de places. Ceux qui demanderont plus tôt auront plus de chances d'être choisis pour participer et d'avoir une place réservée.

D'autre part, le programme ne coûte financièrement que le matériel habituel de classe, étant conçu à l'intérieur des cours. Ceux-ci de plus sont crédités.

Recherche en Lecture au niveau collégial
L'Equipe de Rosemont

Yves Michaud
Thérèse Belzile



Collège de Rosemont

COLLÈGE D'ENSEIGNEMENT GÉNÉRAL ET PROFESSIONNEL DE ROSEMONT

Chèr(e) étudiant(e),

Bonjour,

la présente lettre s'adresse aux étudiants sérieux et soucieux de réussir leurs études académiques.

Ton pointage au Test Diagnostique de Lecture manifeste que tu éprouves des difficultés à lire avec efficacité. Or, c'est là une habileté de base pour réussir dans toute discipline, y compris les sciences et les mathématiques. Cette habileté est particulièrement importante en sciences humaines et en français où le volume de lecture oblige à lire vite et efficacement.

Des recherches ont démontré que des gens intelligents ont des problèmes de rendement académique parce qu'ils ne savent pas bien lire et manquent de méthode de penser et d'apprendre qui soit très bonne. Et ce sont là des habiletés qui peuvent être développées par apprentissage.

Durant la prochaine session, au Cégep de Rosemont, cent vingt étudiants faibles en lecture auront l'opportunité de participer à un projet expérimental d'amélioration de la lecture. Certains prendront deux cours crédités, l'un en psychologie, l'autre en français. D'autres étudiants prendront un cours en psychologie qui sera crédité; d'autres prendront un cours en français et qui sera crédité. Dans le cours de psychologie, on enseignera les principes de l'apprentissage, de la motivation et de la maîtrise du comportement. Dans le cours de français on enseignera les techniques qui feront de chacun des lecteurs efficaces. Enfin, selon le principe reconnu que la meilleure façon d'apprendre, c'est d'enseigner, il sera possible à certains étudiants d'enseigner de devenir tuteurs auprès d'élèves de septième année de Secondaire, élèves qui ont aussi des problèmes de lecture. Ces étudiants seront donc tuteurs d'un élève sur une période de 10 semaines, lui montrant les méthodes et techniques apprises en français et en psychologie. Ceci se fera à raison d'une heure par semaine avec le concours d'une école secondaire des environs. Une expérience semblable réalisée dans deux Cégeps anglophones a eu des succès retentissants.

Le Ministère de l'Éducation a cru bon de subventionner ce projet.

Près de 600 étudiants de Rosemont ont déjà accepté de passer le Test Diagnostique de Lecture, première étape du projet. C'est là un signe de l'intérêt pour la présente recherche et pour une amélioration individuelle du rendement de chacun sur le plan académique. C'est aussi là une étape importante vers l'amélioration des habiletés de l'étudiant et des méthodes d'enseignement.

Le programme du projet offre:

- 1) 2 cours du programme régulier qui est le vôtre, mais qui seront faits selon les méthodes et techniques du projet, et qui seront crédités pour chacun comme cours réguliers, soit

psychologie 350 - 901 sous un nouveau titre.

français 601 - 111 sous un nouveau titre.

- 2) la chance de mettre en pratique les habiletés développées dans une expérience intéressante sur le terrain.
- 3) la chance d'aider quelqu'un d'autre à améliorer efficacement son rendement académique.

Si tu désires participer à ce programme d'amélioration de la lecture, il suffit de remplir la feuille d'application ci-jointe. Si tu es choisi pour participer, tu recevras des instructions sur la façon de t'inscrire pour l'horaire de cours de la session.

Toute question sur le programme peut être adressée par écrit ou par contact personnel à Yves Michaud, département de psychologie, local A-310-6, tél. 376-1620 (poste 287), ou à Thérèse Belzile, département de français, local A-428-3, tél. 376-1620 (poste 283).

Recherche en Lecture au niveau collégial
L'Equipe de Rosemont

Yves Michaud
Thérèse Belzile



Collège de Rosemont

COLLÈGE D'ENSEIGNEMENT GÉNÉRAL ET PROFESSIONNEL DE ROSEMONT

FORMULE D'APPLICATION au Programme d'amélioration des habiletés de lecture.

NOM _____

ADRESSE _____

TELEPHONE _____

ETUDIANT No. de FICHE D'INFORMATION _____

CONCENTRATION au CESEP (v.g. Techniques administratives, etc.)

Mon résultat au Test de Lecture a été

1	_____
2	_____
3	_____

Veuillez écrire sur l'enveloppe l'adresse suivante :

Recherche en lecture au niveau collégial
L'Equipe de Rosemont
Yves Michaud / Thérèse Belzile
Département de psychologie
A - 310 -6.

Remettez l'enveloppe au local A - 310 -4, s'il y a lieu.

Rappelez-vous que vous aurez plus de chances de participer au programme si vous remettez votre enveloppe au plus tôt. Premiers arrivés, premiers servis.

OUI _____ je désire participer au programme d'amélioration.

NON _____ je ne désire pas participer au programme d'amélioration.

271.

Montréal, le 17 mai 1977.

M. Mme Hurtubise
1541 Papineau
Longueuil, P.Q.

L'expérience que m'a donnée le cours de Psychologie 901 fut très appréciée. Il faut dire que c'était la première fois que j'avais l'occasion d'expliquer à une jeune adolescente les bonnes règles de la lecture. J'ai bien adoré cela. Je peux dire que Lucie a beaucoup de talent.

Mlle Hurtubise a fait un progrès grandiose dans sa vitesse. Lors de la dernière mesure, elle lisait 208 mots par minute comparé à 115 m. m.. Pour ses habiletés:

Découverte de l'idée principale: moyen (2) à très bon (4)
Détail: bon (3) à très bon (4)
Suite dans les idées: moyen (2) à très bon (4)
Généralisation: médiocre (1) à bon (3)
Analyse d'un roman: médiocre (1) à moyen (2)
Remplir la fiche de lecture: médiocre (1) à excellent (5)
Organisation de son travail: moyen (2) à très bon (4)
Indépendance: médiocre (1) à très bon (4)
Attitude positive: bon (3) à excellent (5).

Vous pouvez constater avec ces résultats le progrès étonnant de votre jeune fille (étudiante). Elle s'est mérité en tout 239 points. Elle a lu 10 livres en plus des différents articles de journaux que je lui apportais ainsi que par son initiative.

J'aimerais ouvrir une parenthèse pour vous parler du contrat d'été. Ce contrat est l'étape intermédiaire entre ce que Lucie a vécu lors de ces 10 semaines en ma compagnie et l'étape finale. Ce programme a pour but de lire plusieurs livres durant son été et au début de septembre, elle devra me présenter ses améliorations. A cette fin, je prendrai l'initiative de communiquer avec elle pour fixer un rendez-vous. Je lui ai expliqué dans les moindres détails comment procéder. A la fin de ce contrat, elle sera prête à affronter seule le plaisir de la lecture. Je compte sur vous pour l'encourager dans ses efforts.

Pour avoir un meilleur rendement, je lui ai recommandé de ne pas laisser tomber le programme et de travailler ses points faibles comme l'analyse d'un roman i.e. sortir le sens de l'idée principale et de cette façon, elle aura moins de difficulté à étudier dans les moindres détails tout un livre. Je lui conseille aussi de travailler sa généralisation. Ce terme veut dire de pouvoir trouver plusieurs sens à un mot.

Ex: COURS
sociologie: animal
astronomie: groupement d'étoiles
figuratif: homme qui fuit la société.

En terminant, je lui souhaite bonne chance dans ses efforts. Je vous demande de bien vouloir lui rappeler de communiquer avec moi en juillet et août après 7hres p.m. sauf les week-ends. De cette façon, je pourrai me préparer pour la rencontre au mois de septembre.

En espérant une grande amélioration, je vous saurais gré de bien vouloir accepter tous mes remerciements pour la coopération que vous apportez.

Bien à vous,

Christian Joyal
253-2361

Achévé d'imprimer à
Québec en mars 1978, sur
les presses du Service de la reprographie
du Bureau de l'Éditeur officiel
du Québec



L'ÉDITEUR OFFICIEL DU QUÉBEC
SERVICE DE LA REPROGRAPHIE
Mars 1978